

Bosch Video Management System

MBV-BPRO-40



BOSCH

en Configuration Manual

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1

Using the Help

To find out more about how to do something in Bosch Video Management System, access the online Help using any of the following methods.

To use the Contents, Index, or Search:

- ▶ On the **Help** menu, click **Help**. Use the buttons and links to navigate.

To get Help on a window or dialog:

▶

On the toolbar, click .

OR

- ▶ Press F1 for help on any program window or dialog.

1.1

Finding information

You can find information in the Help in several ways.

To find information in the Online Help:

1. On the **Help** menu, click **Help**.
2. If the left-hand pane is not visible, click the **Show** button.
3. In the Help window, do the following:

Click:	To:
Contents	Display the table of contents for the Online Help. Click each book to display pages that link to topics, and click each page to display the corresponding topic in the right-hand pane.
Index	Search for specific words or phrases or select from a list of index keywords. Double-click the keyword to display the corresponding topic in the right-hand pane.
Search	Locate words or phrases within the content of your topics. Type the word or phrase in the text field, press ENTER, and select the topic you want from the list of topics.

Texts of the user interface are marked **bold**.

- ▶ The arrow invites you to click on the underlined text or to click an item in the application.

▶

Click  to get step-by-step instructions

Related Topics

- ▶ Click to display a topic with information on the application window you currently use. This topic provides information on the application window controls.

Concepts, 187 provides background information on selected issues.

Caution!

Medium risk (without safety alert symbol): Indicates a potentially hazardous situation.

If not avoided, this may result in property damage or risk of damage to the unit.

Cautionary messages should be heeded to help you avoid data loss or damaging the system.



Notice!

This symbol indicates information or a company policy that relates directly or indirectly to the safety of personnel or protection of property.

1.2

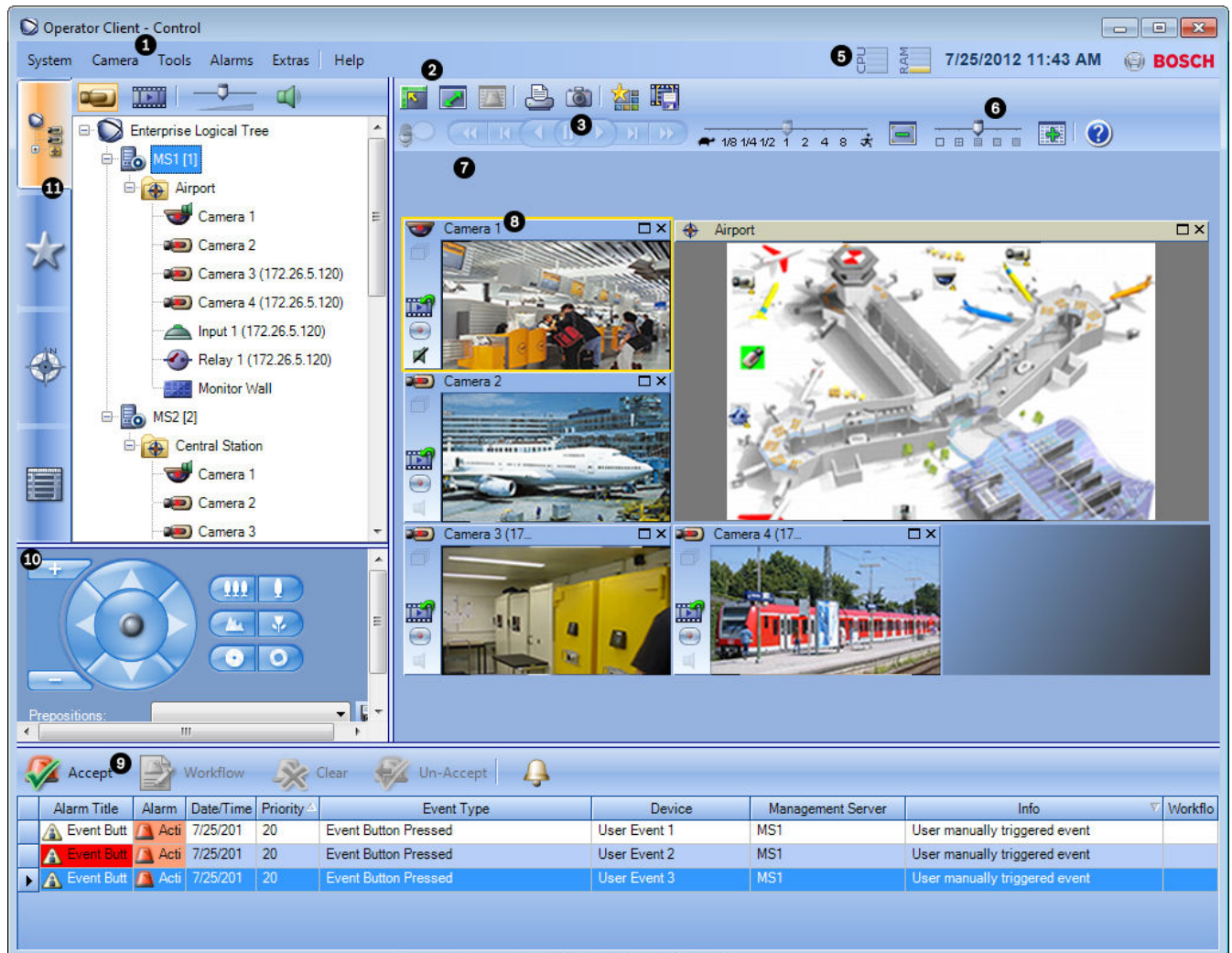
Printing the Help

While using the Online Help, you can print topics and information right from the browser window.

To print a Help topic:

1. Right-click in the right pane and select **Print**.
The **Print** dialog box opens.
2. Click **Print**. The topic is printed to the specified printer.

2 Introduction



1	Menu bar	Allows you to select a menu command.
2	Toolbar	Displays the available buttons. Point to an icon to display a tooltip.
3	Playback controls	Allows you to control instant playback or a camera sequence or alarm sequence.
5	Performance meter	Displays the CPU usage and the memory usage.
6	Slider for Image pane pattern	Allows you to select the required number of Image panes.
7	Image window	Displays the Image panes. Allows you to arrange the Image panes.
8	Image pane	Displays a camera, a map, an image, a document (HTML file).

9	Alarm List window	Displays all alarms that the system generates. Allows you to accept or clear an alarm or to start a workflow, for example, by sending an E-mail to a maintenance person.
10	PTZ Control window	Allows you to control a PTZ camera.
	Monitors window (only available if at least one analog monitor group has been configured)	Displays the configured analog monitor groups. Allows you to switch to the next or previous analog monitor group if available.
11	Logical Tree window	Displays the devices your user group has access to. Allows you to select a device for assigning it to an Image pane.
	Favorites Tree window	Allows you to organize the devices of the Logical Tree as required.
	Map window	Displays a site map. Allows you to drag the map to display a particular section of the map.

This manual guides you through the basic steps of the configuration and operation with Bosch Video Management System.

For detailed help and step-by-step instructions read the Configuration Manual and the Operator's Manual or use the Online Help. You find the manuals as PDF files on your Setup CD.

Bosch Video Management System integrates digital video, audio and data across any IP network.

The system consists of the following software modules:

- Management Server
- VRM recording (Video Recording Manager)
- Operator Client (VRM recording / DiBos DVRs / iSCSI recording / VIDOS NVRs / local recording)
- Configuration Client

To achieve a running system, you must perform the following tasks:

- Install services (Management Server and VRM)
- Install Operator Client and Configuration Client
- Connect to network
- Connect devices to network
- Basic configuration:
 - Add devices (e.g. by device scan)
 - Build logical structure
 - Configure schedules, cameras, events, and alarms
 - Configure user groups
- Operation

Bosch VMS Archive Player displays exported recordings.

3 System overview

If you plan to install and configure Bosch Video Management System, participate in a system training on Bosch Video Management System.

Refer to the Release Notes of the current Bosch Video Management System version for supported versions of firmware and hardware and other important information.

See data sheets on Bosch workstations and servers for information on computers where Bosch Video Management System can be installed.

The following software modules can optionally be installed on one PC.

Tasks of the software modules

- Management Server: Stream management, alarm management, priority management, Management logbook, user management, device state management. Additional Enterprise System license: Managing a server list that contains multiple Management Server computers.
- VRM: Distributing storage capacities on iSCSI devices to the encoders, while handling load balancing between multiple iSCSI devices.
Streaming playback video and audio data from iSCSI to Operator Clients.
- MVS: Provides a transcoding service that adapts the video stream from a camera configured in Bosch Video Management System to the available network bandwidth. This enables mobile video clients like an iPhone to receive live or playback video data via unreliable network connections with limited bandwidth. Not supported on Windows XP.
- Configuration Client: System configuration and administration for Operator Client.
- Operator Client: Live monitoring, storage retrieval and playback, alarm and accessing multiple Management Server computers simultaneously.

3.1 Hardware requirements

See the data sheet for Bosch Video Management System. Data sheets for platform PCs are also available.

3.2 Software requirements

See the data sheet for Bosch Video Management System.

Bosch Video Management System must not be installed on a computer where you want to install Bosch VMS Archive Player.

3.3 License requirements

See the data sheet for Bosch Video Management System for the available licenses.

4 Network configuration



Caution!

Do not connect a device to more than one Bosch Video Management System! This can lead to recording gaps and other undesired effects.

You can connect the following hardware to Bosch Video Management System:

- Mobile video clients like iPhone or iPad via DynDNS
- Various IP cameras, encoders and ONVIF cameras (live only or via Video Streaming Gateway)
Connected via network
- Live only encoders with local storage
Connected via network
- iSCSI storage devices
Connected via network
- VIDOS NVR computer
Connected via network
- Analog cameras
Connected to encoders, DiBos / Bosch Recording Station
- Decoders
Connected via network
- Analog monitors
Connected to a decoder, to a Bosch Allegiant matrix, to a Bosch Video Management System Client workstation
- DiBos / Bosch Recording Station (see the data sheet for Bosch Video Management System for supported versions)
Connected via network
- Bosch Allegiant matrix (Firmware version: 8.75 or greater, MCS version: 2.80 or greater)
Connected to a COM port of the Management Server or to a remote computer and to an IP encoder on the network.
- CCTV keyboard
Connected to the COM port of an Bosch Video Management System workstation (Firmware version: 1.82 or greater) or to a hardware decoder (VIP XD).
If you connect the keyboard to a workstation, the user can control the complete system with the keyboard. If you connect the keyboard to a VIP XD decoder, the user can only control analog monitors with the keyboard.
Only the Bosch IntuiKey Digital Keyboard is supported.
- SMS device
Connected to a COM port of the Management Server
- SMTP E-mail server
Connected via network
- POS
Connected via network
- ATM
Connected via network
- Network monitoring device
Connected via network
- I/O modules
Connected via network

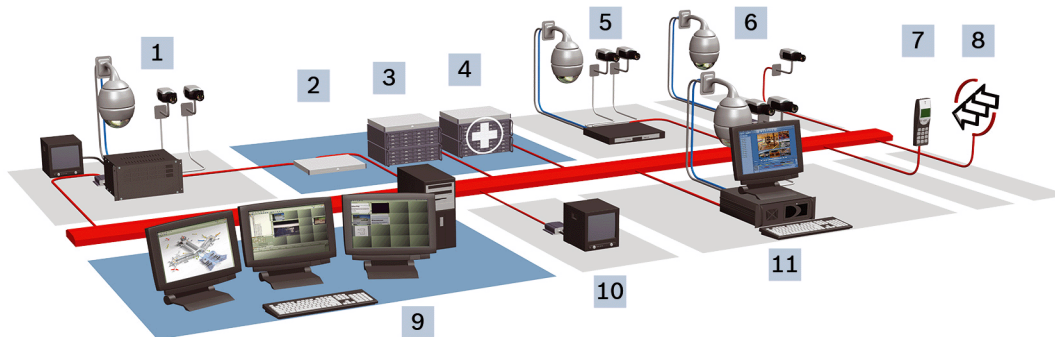
Only ADAM devices are supported.

All devices connected via network are connected to a switch. The computers of the Bosch Video Management System are also connected to this device.

4.1

Installing hardware

The following illustration shows an example of a small Bosch Video Management System network with NVR / DVR storage:



1	Bosch Allegiant matrix with cameras and monitor: Connected to a COM port of one of the computers of the network and to IP encoders connected to the network
2	Management Server
3	Primary NVR
4	Failover NVR, Redundant NVR
5	Encoders with analog cameras
6	IP cameras and IP AutoDomes
7	Communication devices: SMTP E-mail server connected to network, GSM device connected to a COM port of the Management Server
8	Virtual inputs
9	Operator Client workstations, Configuration Client workstation
10	Monitors connected to a decoder (analog monitor groups for alarm processing are possible)
11	DiBos Systems with cameras

Additionally you can connect the following devices:

- ATM / POS (Automatic Teller Machine / Point of Sale)
- RAID subsystems to increase storage capacity
- CCTV keyboard
 - Only Bosch IntuiKey Digital Keyboard is supported.
- I/O modules
 - Only ADAM devices are supported.
- Local storage encoders

5 Getting started

This chapter provides information on how to get started with Bosch Video Management System and with Bosch VMS Archive Player

5.1 Installing the software modules

Caution!

Do not install DiBos Web client on any Bosch VMS computer.

Install every software module on the computer that is supposed to be used for this module.

To install:

1. Insert the product CD-ROM.
2. Start setup.exe or start the Bosch Video Management System Setup on the Welcome screen.
3. In the next dialog box, select the modules to be installed on this computer.
4. Follow the instructions on the screen.

5.2 Activating the software licenses

Main window

When you install Bosch Video Management System for the first time, you must activate the licenses for the software packages that you have ordered, including the base package and any expansions and/or optional features.

To obtain the Activation Key for a license, you need the Authorization Number. This number is included in your product box.

With a Bundle Information file you can ease the process of activating.

Caution!

The computer signature is used for licensing. This computer signature can change after exchanging hardware on the Management Server computer. When the computer signature is changed, the license for the base package becomes invalid.

To avoid licensing problems, finish the hardware and software configuration before you generate the computer signature.

The following hardware changes can make the base license invalid:

Exchanging the network interface card.

Adding a VMWare or VPN virtual network interface.

Adding or activating a WLAN network interface.

Switchover of a Stratus server mainboard without teaming settings.

To activate the software:

1. Start Configuration Client.
2. On the **Tools** menu, click **License Manager....**
The **License Manager** dialog box is displayed.
3. Click to check the boxes for the software package, the features, and the expansions that you want to activate. For the expansions, enter the number of licenses.
If you have received a Bundle Information file, click **Import Bundle Info** to import it.
4. Click **Activate**.
The **License Activation** dialog box is displayed.
5. Write down the computer signature or copy and paste it into a text file.
6. On a computer with Internet access, enter the following URL into your browser:
<https://activation.boschsecurity.com>
If you do not have an account to access the Bosch License Activation Center, either

create a new account (recommended) or click the link to activate a new license without logging on. If you create an account and log on before activating, the License Manager keeps track of your activations. You can then review this at any time.

Follow the instructions to obtain the License Activation Key.

7. Return to the Bosch Video Management System software. In the **License Activation** dialog box, type the License Activation Key obtained from the License Manager and click **Activate**.

The software package is activated.

5.3 Starting Configuration Client

5.4 Configuring the language of Configuration Client

You configure the language of your Configuration Client independently of the language of your Windows installation.







To configure the language:

1. On the **Settings** menu, click **Options...**
The **Options** dialog box is displayed.
2. In the **Language of the Configuration Client:** list, select the desired language.
If you select **Default system language**, the language of your Windows installation is used.
3. Click **OK**.
The language is switched after the next restart of the application.

5.5 Configuring the language of Operator Client

You configure the language of your Operator Client independently of the language of your Windows installation and of your Configuration Client. This step is performed in the Configuration Client.

To configure the language:

1.  Click **User Groups >**  . Click the **User Group Properties** tab.
2. In the **Language:** list, select the desired language.
3.  Click  to save the settings.
4.  Click  to activate the configuration.
Restart Operator Client.

5.6 Adding a new license

Main window

Have the Activation Letter at hand that you received from Bosch.

To add a new license:

1. On the **Tools** menu, click **License Manager...**
The **License Manager** dialog box is displayed.
2. Select the software package that you want to activate.
3. Click **Activate**.
The **License Activation** dialog box is displayed.
4. Type the License Activation Key that you find in the Activation Letter.
5. Click **Activate**.
The software package is activated.
6. Repeat this procedure for each software package that you want to activate.


5.7 Working offline

When Operator Client is disconnected from a Management Server, a respective overlay icon is displayed in the Logical Tree on the disconnected Management Server. You can continue working with Operator Client even if the disconnection lasts longer, but some functions are not available.

If the connection to the Management Server is reestablished, a respective overlay icon is displayed.

If a new configuration on a Management Server has been activated, a respective icon is displayed in the Logical Tree on the icon of the affected Management Server and a dialog box is displayed for some seconds. Accept or refuse the new configuration.

If your Operator Client instance is scheduled to log off at a specific point in time, this logoff occurs even when the connection to the Management Server is not reestablished at this point in time.

When disconnected from a Management Server, all devices are indicated with the  icon. The state overlay of a device in the Logical Tree or on a map when Operator Client is disconnected from the Management Server

The following functions are not available in Operator Client when disconnected from the Management Server for this connection:

- Handling alarms, Alarm List
- Indication of recording
- Indication of state changes
- PTZ control locking
- Analog monitor group
- Scripts

6 Configuring devices



Main window > **Devices**







This chapter provides information on how to configure the devices in your system.

Changing the Device Tree impacts other pages of the Configuration Client:

- **Maps and Structure**
With the devices of the Device Tree you create a user defined structure called Logical Tree. Hence, if you remove a device from the Device Tree, this device is automatically removed from the Logical Tree. But adding a device to the Device Tree does not add this device to the Logical Tree.
- **Cameras and Recording**
All cameras of the Device Tree are available in the Camera Table and the Recording Tables. You cannot modify DiBos or Bosch Allegiant cameras.
- **Events**
All devices of the Device Tree are available in the corresponding Event Tables.
- **User Groups**
You can reduce the functional range of the devices on several permission pages (per user group or Enterprise Account).

You can configure the following devices:

- Bosch Video Streaming Gateway devices
- ONVIF encoders
- Mobile video services
- Video Recording Manager devices
- Primary NVR and Failover NVR
- Encoders
- Encoders with local storage or live only
- Decoders
- DiBos systems
- Analog matrices
- Workstations
- Communication devices
- ATM and POS devices
- Virtual inputs
- I/O modules
- Network monitoring system
- CCTV keyboard
- Analog monitor groups

1.  Click  to save the settings.
2.  Click  to undo the last setting.
3.  Click  to activate the configuration.

See also

- *Adding multiple Management Server computers, 23*

- *Detecting NVRs, their recorded encoders, and decoders, 24*
- *Detecting VRM devices, 25*
- *Configuring NVRs, 25*
- *Adding a device, 29*
- *Configuring an encoder / decoder, 32*
- *Configuring a decoder for use with a CCTV keyboard, 32*
- *Configuring multiple encoders / decoders, 33*
- *Configuring a DiBos system, 34*
- *Configuring a Bosch Allegiant device, 34*
- *Configuring a startup Command Script, 34*
- *Changing the network address of a workstation, 34*
- *Enabling Forensic Search on a workstation, 35*
- *Assigning an analog monitor group to a workstation, 35*
- *Configuring an analog monitor group, 35*
- *Configuring a communication device, 36*
- *Configuring a peripheral device, 36*
- *Configuring network monitoring, 36*
- *Configuring a CCTV keyboard (workstation), 37*
- *Configuring a CCTV keyboard (decoder), 37*
- *Configuring an I/O module, 37*
- *Configuring an Allegiant CCL emulation, 38*
- *Adding a VRM device with iSCSI storage, 38*
- *Configuring an iSCSI device, 38*
- *Adding a LUN, 40*
- *Formatting a LUN, 40*
- *Adding a local storage or live only device, 40*
- *Adding a Video Streaming Gateway device, 41*
- *Adding a Bosch camera to a VSG, 42*
- *Adding an ONVIF camera to a VSG, 42*
- *Configuring multicast for VSG, 43*
- *Switching on VSG recording, 43*
- *NVR & Decoder Scan dialog box, 97*
- *Failover NVR Manager dialog box, 98*
- *IP Device Configuration dialog box, 98*
- *Set IP Addresses dialog box, 99*
- *Set Display Names dialog box, 99*
- *NVRs / Failover NVRs / Redundant NVRs page, 99*
- *Encoders / Decoders page, 128*
- *DiBos page, 103*
- *Matrix Switches page, 105*
- *Workstation page, 106*
- *Analog Monitor Groups page, 108*
- *Communication Devices page, 111*
- *POS + ATM page, 113*
- *Virtual Inputs page, 114*
- *SNMP page, 115*
- *CCTV Keyboards page, 116*
- *I/O Modules page, 117*

6.1 Adding multiple Management Server computers

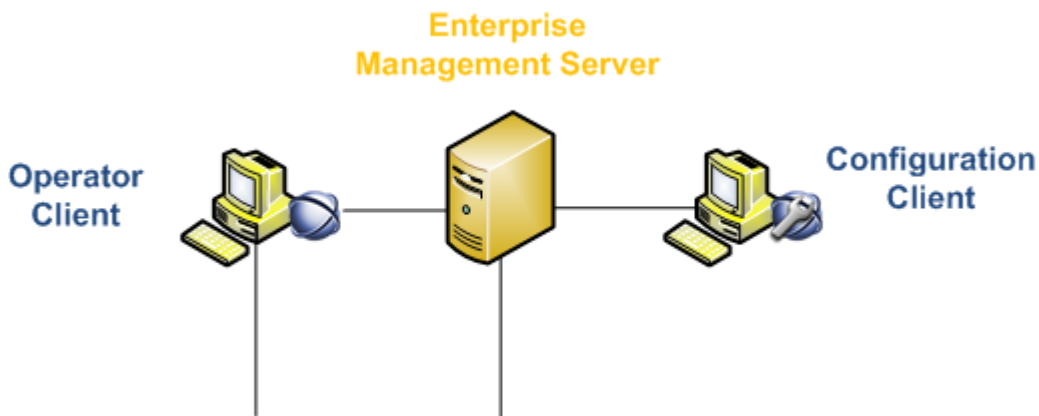


Main window > **Devices > Enterprise System > Server List**

You perform this task of adding multiple Management Server computers in Configuration Client on the Enterprise Management Server.

You add multiple Management Server computers to configure a Bosch VMS Enterprise System. A user of Operator Client can log on with user name of a member an Enterprise User Group to get simultaneous access to these Management Server computers.

The following illustration shows the part of the scenario where you perform this task:



User

Operating permissions are configured on the Enterprise Management Server in **Groups**, Enterprise User Group tab.



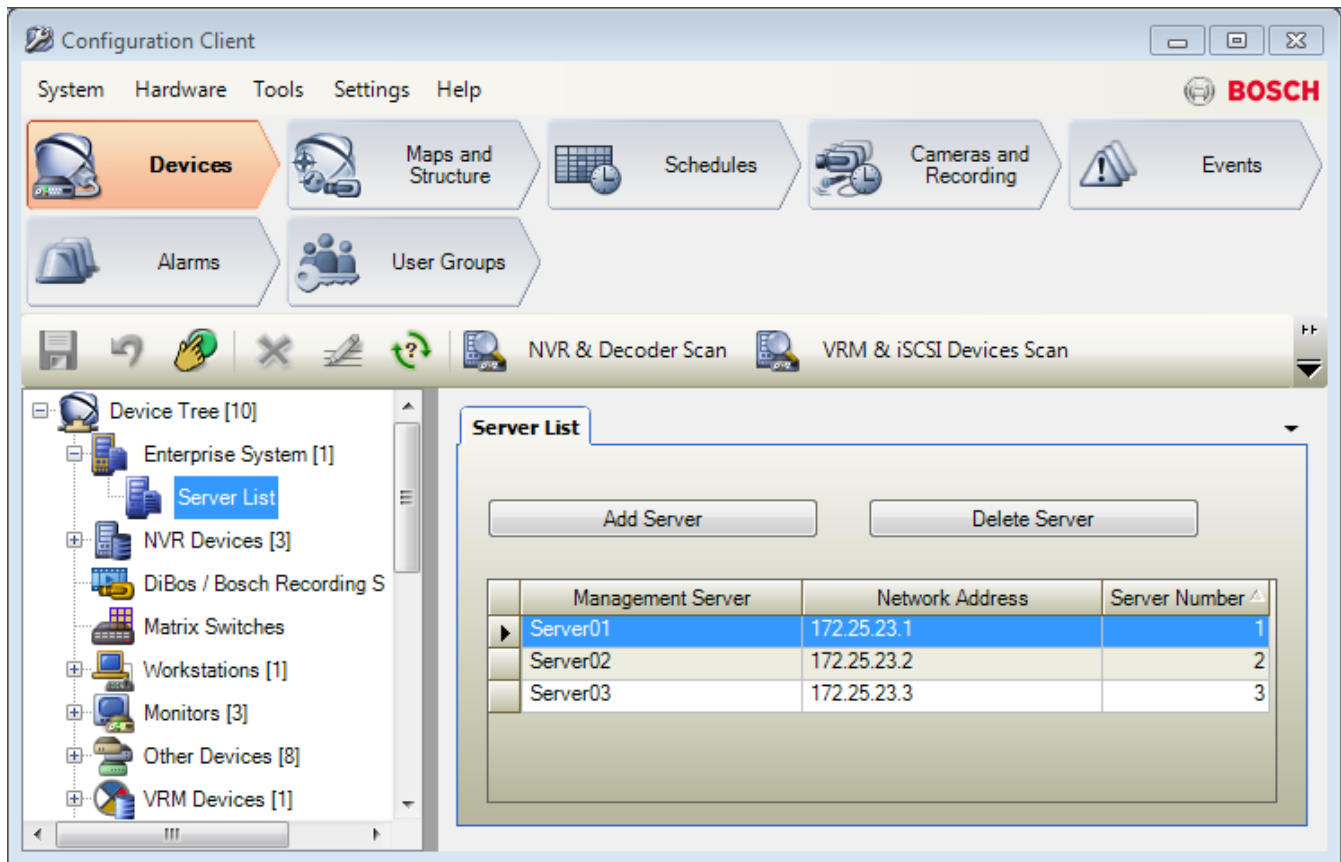
User Groups,

Device permissions are configured on each Management Server in Enterprise Access tab.

To add:

1. Click **Add Server**.
The **Add Server** dialog box is displayed.
 2. Type in a display name for the server and the network address (DNS name or IP address).
 3. Click **OK**.
 4. Repeat these steps until you have added all desired Management Server computers.
- ✓ The Management Server computers for your Enterprise System are configured.
Now configure the desired Enterprise User Groups and the Enterprise Access.

The following screenshot shows an example:



See also

- *Server List* page, 96
- *Enterprise System*, 188
- *User Groups* page, 172

6.2 Detecting NVRs, their recorded encoders, and decoders



Main window > **Devices** > **NVR & Decoder Scan** > **NVR & Decoder Scan** dialog box

You scan the network to detect the following devices:

- NVRs
- Decoders
- Encoders

The system automatically adds a default analog monitor group with the detected decoders

assigned. This analog monitor group is added below .

When you scan the network for the first time, NVRs and decoders are automatically assigned to the system.

You must manually assign detected encoders to NVRs.






To avoid conflicts with duplicate IP addresses you start the initial device scan. This is useful when you integrate new devices in your network which have duplicate IP addresses or the factory default IP address (192.168.0.1). You cannot perform this initial device scan successfully with devices that are password protected.


When you want to add devices that are not members of the same subnet, perform the initial device scan.

To start the initial device scan:

1. On the **Hardware** menu, click **Initial Device Scan...**
The **Initial Device Scan** dialog box is displayed.
2. Click a cell to change the desired address. For changing multiple devices, select the desired rows. You can select multiple devices by pressing the CTRL- or the SHIFT-key. Then right-click the selected rows and click **Set IP Addresses...** or click **Set Subnet Mask...** to change the corresponding values.
You must enter the correct subnet mask before changing an IP address.
3. Click **OK**.

To scan the network:

1. 
Click .
The **NVR & Decoder Scan** dialog box is displayed and all available NVRs, decoders, and encoders are detected.
The detected decoders are listed in the **Decoders** list and assigned automatically to the  tree item of the Device Tree. If no analog monitor group has already been created, the detected decoders are added to a new analog monitor group under  > .
If you do not want to use a decoder or an NVR, remove the item manually: right-click the item and click **Remove**.

- The detected NVRs are assigned automatically to the  tree item of the Device Tree.
2. In the **Unassigned Encoders** list, select an encoder and drag it to an NVR in the **Assigned Encoders and NVRs** list. The encoder's cameras are recorded on the selected NVR.
 3. Repeat the above step for every detected encoder that you want to be part of your system. Encoders that you do not drag to an NVR, are completely invisible in Bosch Video Management System.
 4. Click **Next >**.
If required, a dialog box is displayed for changing the device names of the connected devices of the detected IP devices to be used for display. Bosch Video Management System names the devices with default names. If desired, you can use the existing names of the devices.
 5. Make the required settings. For changing the displayed device names of a complete column at once, right-click a column with check boxes and click **Select Column**.
 6. Click **Finish**.

6.3

Detecting VRM devices

6.4

Configuring NVRs



Main window >  **Devices**

This chapter provides information on how to configure NVRs in your system.

Primary NVRs record the images of all assigned encoders and IP cameras connected to your system.

A Failover NVR is a server that takes over the tasks of a failing Primary NVR. The Failover NVR starts recording as soon as the Primary NVR fails. A Failover NVR cannot have any encoders directly assigned. A Failover NVR can take over the tasks of a Primary NVR even when Management Server is not available.

You can assign maximum one Failover NVR to a Primary NVR and you can assign multiple Primary NVRs to one Failover NVR.

When the Primary NVR works correctly again, the Primary NVR takes back his tasks from the Failover NVR automatically. The Failover NVR stops recording some seconds after the Primary NVR has started recording. The recordings of the down time stay on the Failover NVR.







A Redundant NVR performs the same recording tasks as the assigned Primary NVR. A Primary NVR can have maximum one Redundant NVR assigned. On a Redundant NVR, you cannot configure the recording and event settings of the assigned devices independently from the Primary NVR. A Redundant NVR just retrieves video and audio streams and forwards them to a database. When you change the recording settings on the Primary NVR, these settings are synchronized on the Redundant NVR.

If you remove an NVR from the Device Tree, the recordings of this NVR are not deleted. You can retrieve them by activating a previous configuration version containing this NVR.

You can assign a Failover NVR to a Redundant NVR. When the Redundant NVR fails, the Failover NVR takes over its tasks, i.e. it acts like a Redundant NVR.

The recordings are performed in different modes depending on your configuration:

- Continuous recording
- Pre-event recording
- Motion recording
- Alarm recording

1.  Click  to save the settings.
2.  Click  to undo the last setting.
3.  Click  to activate the configuration.

6.4.1 Configuring a Primary NVR

Main window >  **Devices** > Expand  > Expand  > 

You can perform the following tasks to configure a selected NVR:

- Configure video and audio storage
- Assign a Failover NVR
- Configure backup

To configure an NVR:

1. Click the **Global Settings** tab to assign a Failover NVR to this NVR. The **Switch over to:** list contains only NVRs that have been configured as Failover NVRs.
2. Click the **Disk Storage** tab to configure the storage settings of the selected NVR.
3. Click the **Camera Storage** tab to define minimum and maximum storage times, manage protected recordings, and to optionally schedule the backup of the assigned cameras. If scheduled backups are desired, you must first create a Task Schedule in **Schedules**.

Related Topics

6.4.2 Switching an NVR to a Failover NVR



Main window >  **Devices** > Expand  > Expand  > 

To configure a Failover NVR you must first change an NVR to a Failover NVR.

To switch an NVR:

1. Right-click an NVR. This NVR must not have any encoders assigned.
2. Click **Act as Failover NVR**. The NVR is moved to the **Failover NVRs** node.

6.4.3 Switching an NVR to a Redundant NVR



Main window >  **Devices** > Expand  > Expand  > 

To configure a Redundant NVR you must first change an NVR to a Redundant NVR.

To switch an NVR:

1. Right-click an NVR. This NVR must not have any encoders assigned.
2. Click **Act as Redundant**. The NVR is moved to the **Redundant NVRs** node.

6.4.4 Configuring a Failover NVR



Main window >  **Devices** > Expand  > Expand  > 

Before you can configure a Failover NVR you must switch a Primary NVR to a Failover NVR.

After having configured a Failover NVR, you assign it to one or multiple NVRs.

You can perform the following tasks to configure a selected Failover NVR:

- Configuring video and audio storage
- Assigning NVRs

To configure a Failover NVR:

1. Click the **Global Settings** tab to display network settings of the selected Failover NVR.
2. Click the **Disk Storage** tab to configure the storage settings of the selected Failover NVR.
3. Click the **Assigned NVRs** tab to add or remove NVRs to the selected Failover NVR.

For detailed information on the various fields, see the Online Help for the appropriate application window.

6.4.5 Configuring a Redundant NVR



Main window >  **Devices** > Expand  > Expand  > 

Before you can configure a Redundant NVR you must switch a Primary NVR to a Redundant NVR.

After having configured a Redundant NVR, you assign it to one or multiple NVRs.

You can perform the following tasks to configure a selected Redundant NVR:




- Configuring video and audio storage
- Assigning NVRs

To configure a Redundant NVR:

1. Click the **Global Settings** tab to display network settings of the selected Redundant NVR.
2. Click the **Disk Storage** tab to configure the storage settings of the selected Redundant NVR.

3. Click the **Camera Storage** tab to configure the camera settings of the selected Redundant NVR. This page is only available, if on the **Assigned NVR** page the **Backup** option is checked.
4. Click the **Assigned NVR** tab to add or remove NVRs to the selected Redundant NVR. For detailed information on the various fields, see the Online Help for the appropriate application window.

6.4.6 Assigning NVRs to Failover NVRs

Main window >  **Devices** > Expand  > Expand 


or

Main window >  **Devices** > Expand  > Expand 


For an NVR, you can configure a Failover NVR that takes over the tasks of the NVR if it fails. Ensure that an NVR is switched to a Failover NVR.

You can easily configure several NVRs to have a Failover NVR assigned.

To assign an NVR to a Failover NVR:

1. Expand .
2. Select an NVR as required.
3. Click the **Global Settings** tab.
4. In the **Failover NVR** list, select the required Failover NVR.

To assign multiple NVRs to a Failover NVR:

1. Expand .
 2. Select the desired Failover NVR.
 3. Click the **Assigned NVRs** tab.
 4. In the **Time [h]** column, select the required NVRs.
 5. Click **Add NVR**.
- Each added Primary NVR has the selected Failover NVR assigned.

6.4.7 Assigning NVRs to a Redundant NVR

Main window >  **Devices** > Expand  > Expand 

You can only assign one NVR to a Redundant NVR. If you select a Primary NVR that already has been assigned to another Redundant NVR, the assignment to the previous Redundant NVR is removed.

Ensure that an NVR is switched to a Redundant NVR.

To assign a Primary NVR to a Redundant NVR:

1. Select the desired Redundant NVR.
2. Click the **Assigned NVR** tab.
The table displays all Primary NVRs.
3. In the first column, click to check the desired NVR.
Each checked primary NVR has the selected Redundant NVR assigned.
4. In the **Backup** column, make the desired setting.
When cleared, the **Camera Storage** tab becomes active.

6.4.8 Displaying information on an NVR



Main window > **Devices** > Expand > Expand >

You can display the following information on an NVR:

- Network related information
- Disk usage statistics and the available disk space on the NVR.

To display information on an NVR:

- ▶ Click the **Disk Storage** tab to view information on the selected NVR.

6.4.9 Changing the network address of an NVR / Failover NVR / Redundant NVR



Main window > **Devices** > Expand > Expand

or



Main window > **Devices** > Expand > Expand

or



Main window > **Devices** > Expand > Expand

To change the IP address of an NVR / Failover NVR / Redundant NVR:

1. Right-click / / and click **Change network address**.
The **Network address** dialog box is displayed.
2. Change the entry in the field according to your requirements.

6.5 Adding a device



Main window > **Devices**

You add the following devices to the Device Tree manually because these devices are not added by a network scan:

- ONVIF cameras
- Video Streaming Gateway devices
- DiBos system
- Analog matrix

For adding a Bosch Allegiant device, you need a valid Allegiant configuration file.

- Bosch Video Management System workstation
A workstation must have the Operator Client software installed.
- Communication device
- Bosch ATM/POS Bridge, ATM device
- Virtual input
- Network monitoring device
- CCTV keyboard
- Analog monitor group

- I/O module
- Allegiant CCL emulation


Decoders, encoders, NVRs including VIDOS NVRs, and VRMs are detected by the network scan.




Notice!

After having added a device, click  to save the settings.

To add a DiBos system:



1.  Right-click .
Click **Add DiBos/BRS Recorder**.
The **Add DiBos/BRS System** dialog box is displayed.
3. Enter the appropriate values.
4. Click **Scan**.
The DiBos system is added to your system.
5. In the displayed message box, click **OK** to confirm.

To add a Bosch Allegiant device:



1.  Right-click and click **Add Allegiant**.
The **Open** dialog box is displayed.
2. Select the appropriate Allegiant configuration file and click **OK**.
The Bosch Allegiant device is added to your system.

Note: You can add only one Bosch Allegiant matrix.



To add a Bosch Video Management System workstation:

1.  Right-click and click **Add Workstation**.
The **Add Workstation** dialog box is displayed.
2. Enter the appropriate value click **OK**.
 The workstation is added to your system.



To add an analog monitor group:

1.  Expand , right-click  and click **Add Monitor Group**.
The **Create New Analog Monitor Group** dialog box is displayed.
If you already have performed a network scan, and decoders have been detected, there is already a default analog monitor group available with all detected decoders assigned.
2. Make the appropriate settings.
3. Click **OK**.
The analog monitor group is added to your system.



To add a communication device:

1.  Expand , right-click  and click the required command.
The appropriate dialog box is displayed.
2. Enter the appropriate settings.
3. Click **OK**.
The communication device is added to your system.



To add a peripheral device:

1.  , right-click  and click the required command.
The appropriate dialog box is displayed.
2. Enter the appropriate settings.
3. Click **OK**.
The peripheral device is added to your system.

To add a virtual input:

1.  , click  .
The corresponding page is displayed.
2. Click **Add Inputs**.
A row is added to the table.
3. Make the appropriate settings.
4. Click **Add** .
The virtual input is added to your system.



To add a network monitoring device:

1.  , right-click  and click **Add SNMP**.
The **Add SNMP** dialog box is displayed.
2. Type a name for the SNMP device.
The network monitoring device is added to your system.

To add a CCTV keyboard:

1.  , click  .
The corresponding page is displayed.
2. Click **Add Keyboard**.
A row is added to the table.
3. Make the appropriate settings.
The keyboard is added to your system.



To add an I/O module:

1.  , right-click  and click **Add New ADAM Device**.
The **Add ADAM** dialog box is displayed.
2. Type the IP address of the device.
If you want to skip the currently selected device and jump to the next one, click **Skip**.
3. Select the device type.
The corresponding page is displayed.
4. Click the **Inputs** tab to change the display names of the inputs if required.
5. Click the **Name** tab to change the display names of the Relays if required.

**Notice!**

You can also perform a scan for ADAM devices (**Scan for ADAM Devices**). The IP addresses of the devices are detected. If available the device type is preselected. You must confirm this selection.

To add an Allegiant CCL emulation:

1.  , click  .
The **Allegiant CCL Emulation** tab is displayed.
2. Click to check **Enable Allegiant CCL Emulation**.
3. Make the required settings.
The Allegiant CCL emulation service is started on the Management Server.

6.6**Configuring an encoder / decoder****To configure an encoder:**

Main window >  **Devices** > Expand  > Expand  > Expand  > 

or

Main window >  **Devices** > Expand  > Expand  > 

or


Main window >  **Devices** >  > 

To configure a decoder:

Main window >  **Devices** > Expand  > Expand  > 

To configure an encoder or a decoder:

- Make the appropriate settings on the tab pages of the encoder or decoder.

See the Online Help for the  pages for details.

**Notice!**

IP devices can be connected that do not have all configuration pages that are described here.

6.7**Configuring a decoder for use with a CCTV keyboard**

Main window >  **Devices** > Expand  > Expand 

Perform the following steps to configure a VIP XD decoder that is connected to a CCTV keyboard.

To configure a decoder:

1. Click the appropriate decoder which is used for connecting a CCTV keyboard.
2. Click the **Periphery** tab.
3. Ensure that the following settings are applied:
 - Serial port function: **Transparent**
 - Baud rate: **19200**
 - Stop bits: **1**

- Parity check: **None**
- Interface mode: **RS232**
- Half-duplex mode: **Off**

6.8 Configuring multiple encoders / decoders

Main window

You can modify the following properties of multiple encoders and decoders at once:

- Display names
- IP addresses
- Firmware versions



Notice!

Changing the IP address of an IP device can make it unreachable.

To configure multiple IP addresses:

1. On the **Hardware** menu, click **IP Device Configuration....** The **IP Device Configuration** dialog box is displayed.
2. Select the required devices. You can select multiple devices by pressing the CTRL- or the SHIFT-key.
3. Right-click the selected devices and click **Set IP Addresses....** The **Set IP Addresses** dialog box is displayed.
4. In the **Start with:** field, type the first IP address.
5. Click **Calculate**. In the **End with:** field, the last IP address of the range for the selected devices is displayed.
6. Click **OK**.
7. In the **IP Device Configuration...** dialog box, click **Apply**.
The new IP addresses are updated in the selected devices.

To configure multiple display names:

1. On the **Hardware** menu, click **IP Device Configuration....** The **IP Device Configuration** dialog box is displayed.
2. Select the required devices. Multiple selection is possible by pressing the SHIFT key.
3. Right-click the selected devices and click **Set Display Names...** The **Set Display Names** dialog box is displayed.
4. In the **Start with:** field, type the first string.
5. Click **Calculate**. In the **End with:** field, the last string of the range for the selected devices is displayed.
6. Click **OK**.
7. In the **IP Device Configuration...** dialog box, click **Apply**.
The calculated names are updated in the selected devices.

To update firmware for multiple devices:

1. On the **Hardware** menu, click **IP Device Configuration....** The **IP Device Configuration** dialog box is displayed.
2. Select the required devices.
3. Click **Update Firmware**.
4. Select the file containing the update.
5. Click **OK**.

6.9 Configuring a DiBos system

Main window >  **Devices** > Expand  > 



Notice!

You do not configure the DiBos system itself but only the Bosch Video Management System related properties.

To scan for new DiBos devices:



Right-click  and click **Scan for DiBos Devices**.

The DiBos system is scanned for new devices and they are added.

To remove an item:

1. Click the **Cameras** tab, the **Relays** tab, or the **Inputs** tab.
2. Right-click an item and click **Remove**. The item is removed.

To rename a DiBos device:

1. Right-click a DiBos device and click **Rename**.
2. Type the new name for the item.

6.10 Configuring a Bosch Allegiant device

Main window >  **Devices** > Expand  > 

You do not configure the Bosch Allegiant device itself but only the Bosch Video Management System related properties.

To assign an output to an encoder:

1. Click the **Outputs** tab.
2. In the **Usage** column, click **Digital Trunk** in the desired cells.
3. In the **Encoder** column, select the desired encoder.

Adding an input to a Bosch Allegiant device:

1. Click the **Inputs** tab.
2. Click **Add Inputs**. A new row is added to table.
3. Type the required settings in the cells.

Deleting an input:

1. Click the **Inputs** tab.
2. Click the required table row.
3. Click **Delete Input**. The row is deleted from the table.

6.11 Configuring a startup Command Script

See *Configuring a startup Command Script*, 67.

6.12 Changing the network address of a workstation

Main window >  **Devices** > Expand  > 

To change the IP address:

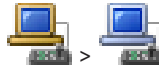
1.

Right-click  and click **Change Network Address**.

The **Change Network Address** dialog box is displayed.

2. Change the entry in the field according to your requirements.

6.13 Enabling Forensic Search on a workstation



Main window >  **Devices** > Expand >  > **Settings** page

You must enable Forensic Search on a workstation.

Note:

Enable video content analysis on each encoder. Use the VCA page of the encoder in the Device Tree.

To enable Forensic Search:

- ▶ Click to select the **Enable Forensic Search** check box.

6.14 Assigning an analog monitor group to a workstation



Main window >  **Devices** > Expand >  > **Analog Monitor Groups** page

You assign an analog monitor group to a Bosch Video Management System workstation. In the **Options** dialog box, you can configure that all workstations can control analog monitor groups regardless of the setting here.

To assign an analog monitor group:

- ▶ In the **Assigned Analog Monitor Groups** column, select the check box.

6.15 Configuring an analog monitor group



Main window >  **Devices** > Expand >  >

Caution!

You cannot control an analog monitor group from within Operator Client when the connection to the Management Server is lost or when Operator Client with Enterprise System is used.

You configure the monitors in an analog monitor group logically in rows and columns. This arrangement does not have to meet the physical arrangement of the monitors.

To configure an analog monitor group:


1. In the **Name:** field, type a name for the analog monitor group.
2. In the **Columns:** and **Rows:** fields, enter the desired values.
3. Drag each available decoder to an analog monitor image on the right.
The logical number of the decoder is displayed as a black number on the monitor image and the color of this image changes.
If no decoder is available, unassign a decoder from another analog monitor group or repeat network scan.
4. Click the **Advanced Configuration** tab.
5. Change the logical numbers of the assigned decoders as required. If you enter an already used number, a message box is displayed.
6. Click **Quad View** to enable quad view for this decoder.

Note:

We do not recommend configuring quad view for H.264 cameras.

7. In the **Initial Camera** column, select the desired camera.
8. In the OSD related columns, select the desired options.

6.16 Adding a monitor wall

Main window >  **Devices** > Right-click  > Click **Add Monitor Wall**

Main window >  **Maps and Structure**

After having added the monitor wall, the user of Operator Client can control this monitor wall. The user can change the monitor layout and assign encoders to monitors.

To add:

1. Select the desired decoder.
2. If required, enter the maximum number of monitors and configure thumbnails.

3.  Click .

4.  Click  **Maps and Structure**.

5. Drag the monitor wall to the Logical Tree.
6. If required, configure the access to the monitor wall with corresponding user group permissions.



See also

- *Add Monitor Wall dialog box, 110*

6.17 Configuring a communication device






Main window >  **Devices** > Expand  > Expand 

To configure a communication device:

1. Click the required device:  or .
2. Make the appropriate settings.

For detailed information on the various fields, see the Online Help for the appropriate application window.

6.18 Configuring a peripheral device

Main window >  **Devices** > Expand  > Expand  >  or 

To configure a peripheral device:


- Change the required settings.

For detailed information on the various fields, see the Online Help for the appropriate application window.

6.19 Configuring network monitoring

Main window >  **Devices** > Expand 

To configure the SNMP trap receiver:

1. Click  to display the **SNMP Trap Receiver** page.
 2. Make the required settings.
- For detailed information on the various fields, see the Online Help for the appropriate application window.

6.20**Configuring a CCTV keyboard (workstation)**

Main window >  **Devices** > Expand  > 

To configure a CCTV keyboard connected to a workstation:

1. Click the **Settings** tab.
 2. In the **Keyboard Serial Port Settings** field, make the required settings.
- For detailed information on the various fields, see the Online Help for the appropriate application window.


6.21**Configuring a CCTV keyboard (decoder)**

Main window >  **Devices** > Expand  > 





To configure a CCTV keyboard connected to a decoder:

1. In the **Connection** column, click a cell, and select the appropriate decoder.
You can also select a workstation, if the CCTV keyboard is connected to it.



- A workstation must be configured on the  page.
2. In the **Connection Settings** field, make the required settings.
- For detailed information on the various fields, see the Online Help for the appropriate application window.

6.22**Configuring an I/O module**

Main window >  **Devices** > Expand  > Expand  > 

To configure an I/O module:

1. Click the **ADAM** tab.
2. In the **ADAM type** list, select the appropriate device type.

Caution!

Do not change the device type if not really necessary.
If you for example change the device type to a type with less inputs, all configuration data for the removed inputs get lost.

1. Click the **Inputs** tab.
2. In the **Name** column, change the display name of an input if required.
3. Click the **Relays** tab.
4. In the **Relays** column, change the name of a relay if required.

For detailed information on the various fields, see the Online Help for the appropriate application window.

6.23 Configuring an Allegiant CCL emulation



Main window > **Devices** > Expand

To use the CCL commands you need the CCL User Guide. This manual is available in the Online Product Catalog in the document section of each LTC Allegiant Matrix.

Allegiant CCL commands supported in Bosch VMS, 196 lists the CCL commands supported in Bosch Video Management System.

To configure an Allegiant CCL emulation:

1. Click **Enable Allegiant CCL Emulation**.
2. Configure the communication settings as required.

For detailed information on the various fields, see the Online Help for the appropriate application window.

6.24 Adding a mobile video service



Main window > **Devices** > Right-click > Click **Add Mobile Video Service**

You can add a transcoding service to your Bosch Video Management System. The following devices can receive video data from Bosch Video Management System:

- iPad (via App)
- iPhone (via App)

To add:

1. Type in the URI of your mobile device.
 2. Click **OK**.
- ✓ The configured device can now receive live and playback video data from your Bosch Video Management System.

See also

- *Add Mobile Video Service dialog box, 119*

6.25 Adding a VRM device with iSCSI storage



Main window > **Devices** >

In your network, you need a VRM service running on a computer, and an iSCSI device.

Caution!

When you add an iSCSI device with no targets and LUNs configured, start a default configuration and add the IQN of each encoder to this iSCSI device.

When you add an iSCSI device with targets and LUNs pre-configured, add the IQN of each encoder to this iSCSI device.

See *Configuring an iSCSI device, 38* for details.

6.26 Configuring an iSCSI device





After adding VRM devices, iSCSI devices, and encoders, perform the following tasks to ensure that video data of encoders is stored on the iSCSI devices or video data can be retrieved from these iSCSI devices:

- Execute the default configuration to create LUNs on each target of the iSCSI device. This step is optional. You do not need to perform this step on an iSCSI device with LUNs pre-configured.
- Scan the iSCSI device to add the targets and LUNs to the Device Tree after default configuration.






Note:

Not all iSCSI devices support the default configuration and automatic IQN mapping.




To perform the default configuration of an iSCSI device:




1. Expand the appropriate VRM device  , click the appropriate iSCSI device  .
2. Click the **Default Configuration** tab.
LUNs are created on the targets of the iSCSI device.
3. Format these LUNs.
See Formatting a LUN, 40.
4. When the process has finished, click  to save the settings.
5. Click  to activate the configuration.

To scan the iSCSI device:

1. Expand the appropriate VRM device  , click the appropriate iSCSI device  .
2. Right-click  and click **Scan iSCSI Device**.
The process is started.
Targets and LUNs are detected and added to the Device Tree below the iSCSI node.
3. Click  to save the settings.
4. Click  to activate the configuration.

To perform IQN mapping:

1. Expand the appropriate VRM device  , click the appropriate iSCSI device  .
2. Right-click  and click **Map IQNs**.
The iqn-Mapper dialog box is displayed and the process is started.

The encoders that are assigned to the selected VRM device  are evaluated and their IQNs are added to this iSCSI device.
3. Click  to save the settings.
4. Click  to activate the configuration.


6.27 Adding a LUN




Main window > **Devices** > Expand

Usually the network scan adds the desired iSCSI devices with their targets and LUNs automatically. If your network scan did not work correctly or you want to configure your iSCSI device offline before it is actually integrated into your network, you configure a target in your iSCSI device and on this target you configure one or more LUNs.

To configure:

1.  Right-click and click **Add Target**.
The **Add Target** dialog box is displayed.
2. Enter the desired target number and click **Ok**.

The target  is added.
3. Click the new target.
The **LUNs** page is displayed.
4. Click **Add**.
The **Add LUN** dialog box is displayed.
5. Enter the desired LUN number and click **Ok**.
The LUN is added as a new table row.
Repeat this step for each desired LUN.

Notes:

- To remove a LUN, click **Remove**.
The video data remains on this LUN.
- To format a LUN, click **Format**.
All data on this LUN is removed!

6.28 Formatting a LUN



Main window > **Devices** > Expand

You format a LUN to prepare it for the first use.



Notice!

All data on the LUN is lost after formatting.

To configure:

1. On the **LUNs** page, select the desired LUN and, in the **Format** column, click to check.
2. Click **Format LUN**.
3. Read the displayed message carefully and confirm the message if desired.
The selected LUN is formatted. All data on this LUN is lost.

6.29 Adding a local storage or live only device



Main window > **Devices** >



or





Main window > **Devices** >

You can add Bosch or ONVIF encoders with local storage or live only encoders.



To add a local storage:

1.  Right-click  and click **Scan Local Storage Encoders**.
The **Bosch VMS Scan Wizard** is displayed.
2. Assign the device.
If required assign multiple devices.
3. Click **Next >>**.
The next step of the wizard is displayed.
4. Click **Finish**.
The device is connected to your Bosch Video Management System.

To add a Bosch live only device:

1.  Right-click  and click **Scan live-only Encoders**.
The **Bosch VMS Scan Wizard** is displayed.
2. Assign the device.
If required assign multiple devices.
3. Click **Next >>**.
The next step of the wizard is displayed.
4. Click **Finish**.
The device is connected to your Bosch Video Management System.

To add an ONVIF live only device:

1.  Right-click  and click **Scan live-only ONVIF Encoders**.
The **Bosch VMS Scan Wizard** is displayed.
2. Assign the device.
If required assign multiple devices.
3. Click **Next >>**.
The next step of the wizard is displayed.
4. Click **Finish**.
The device is connected to your Bosch Video Management System.

6.30

Adding a Video Streaming Gateway device



Main window > **Devices** Expand  > Right-click  > Click **Add Streaming Gateway** > **Edit Streaming Gateway** dialog box

You add a VSG to the system to enable assigning and configuring cameras to this VSG.

To add a VSG:

1. Make the required settings for your VSG device.
2. Click **Add**.
- ✓ The VSG device is added to the system. The cameras assigned to this VSG are recorded.




See also

- *Video Streaming Gateway device page, 123*

6.31**Adding a Bosch camera to a VSG**

Main window >  **Devices** > Expand  > Expand  > 

To add a camera:

1. Select the desired cameras and click  to add them to the **VSG cameras** list.
The **Add/Edit** dialog box is displayed.
Note: Select cameras of the same type, for example only Bosch cameras. Otherwise the  button is disabled.
2. Type in user name and password and click **Connect**.
If the connection to the encoder is established successfully, the configuration settings in the **Protocol settings** group are active.
If you do not want to wait until the connection is established, click **Skip**.
3. In the **Type** list, select Bosch RCP+.
4. In the **Video input** and **Stream** and **Protocol** lists make the required settings.
5. If required, type a name for the camera in the **VSG Camera Name** column.
6. Click **OK**.
7. Click .




See also

- *Add/Edit dialog box (Video Streaming Gateway), 124*
- *Assignment tab (Video Streaming Gateway), 124*

6.32**Adding an ONVIF camera to a VSG**

Main window >  **Devices** > Expand  > Expand  > 

To add a camera:

1. Select the desired cameras and click  to add them to the **VSG cameras** list.
The **Add/Edit** dialog box is displayed.
Note: Select cameras of the same type, for example only Bosch cameras. Otherwise the  button is disabled.
2. Type in user name and password and click **Connect**.
If the connection to the encoder is established successfully, the configuration settings in the **Protocol settings** group are active.
If you do not want to wait until the connection is established, click **Skip**.
3. In the **Type** list, select ONVIF.
4. In the **Stream** and **Token** lists make the required settings.
5. If required, type a name for the camera in the **VSG Camera Name** column.
6. Click **OK**.
7. Click .

See also

- *Add/Edit dialog box (Video Streaming Gateway), 124*

6.33**Configuring multicast for VSG**

Main window >

Devices

> Expand




> Expand



>

For each camera assigned to a Video Streaming Gateway device you can configure a multicast address with port.

To configure multicast:

1. Click to enable multicast.
2. Type in a valid multicast address and a port number.
3. If required, configure continuous multicast streaming.
4. Click .

See also

- *Multicast tabs (Video Streaming Gateway), 126*

6.34**Switching on VSG recording**

Main window >

Devices

> Expand




> Expand



>

To switch on:

1. Click the **Recording Profiles** tab.
 2. Select the line of the camera, for which you want to switch on recording.
 3. In the **Recording** list, select **On**.
 4. Click .
- Recording for this camera starts.

See also

- *Recording profiles tab (Video Streaming Gateway), 126*

7 Configuring the structure

This chapter provides information on how to configure the Logical Tree and how to manage resource files such as maps.









Notice!

If you move a group of devices in the Logical Tree, these devices lose their permission settings. You must set the permissions in the **User Groups** page again.

Follow these references to get detailed information on the available application windows:

- *Resource Manager dialog box, 151*
- *Select Resource dialog box, 151*
- *Sequence Builder dialog box, 151*
- *Add Sequence dialog box, 152*
- *Add Sequence Step dialog box, 153*
- *Add URL dialog box, 153*
- *Select Map for Link dialog box, 153*

1.  Click  to save the settings.
2.  Click  to undo the last setting.
3.  Click  to activate the configuration.

7.1 Configuring the Logical Tree

7.2 Adding a device to the Logical Tree



Main window >  **Maps and Structure**

To add a device:

- ▶ Drag an item from the Device Tree to the required location in the Logical Tree.
You can drag a complete node with all sub-items from the Device Tree to the Logical Tree.
You can select multiple devices by pressing the CTRL- or the SHIFT-key.

7.3 Removing a tree item



Main window >  **Maps and Structure**

To remove a tree item from the Logical Tree:

- ▶ Right-click an item in the Logical Tree and click **Remove**. If the selected item has sub-items, a message box is displayed. Click **OK** to confirm. The item is removed.
When you remove an item from a map folder of the Logical Tree, it is also removed from the map.

7.4 Managing resource files



Main window >  **Maps and Structure** > 

or



Main window >

Alarms >

You can import resource files in the following formats:


- DWF files (2 D, map resource files)
For use in Operator Client, these files are converted to a bitmap format.
- HTML files (map document files)
- MP3 (audio file)
- TXT files (Command Scripts or camera sequences)
- MHT files (Web archives)
- URL files (links to Web pages)
- WAV (audio file)

The imported resource files are added to a database. They are not linked to the original files.




Notice!


After each of the following tasks:

Click  to save the settings.



To import a resource file:

1.  .
The **Import Resource** dialog box is displayed.
2. Select one or more files.
3. Click **Open**.
The selected files are added to the list.
If a file has already been imported, a message box is displayed.
If you decide to import an already imported file again, a new entry is added to the list.



To remove a resource file:

1. Select a resource file.
2.  .
The selected resource file is removed from the list.

To rename a resource file:



1. Select a resource file.
2.  .
Click  .
3. Enter the new name.
The original file name and creation date persists.

To replace the content of a resource file:

1. Select a resource file.
2.  .
Click  .
The **Replace Resource** dialog box is displayed.
3. Select a file with the appropriate content and click **Open**.
The resource name persists, the original file name is exchanged with the new file name.

To export a resource file:

1. Select a resource file.

2.  Click  .
A dialog box for selecting a directory is displayed.
3. Select the appropriate directory and click **OK**.
The original file is exported.

7.5 Adding a Command Script





Main window > **Maps and Structure**

Before you can add a Command Script, you must have Command Script files imported or created.

If required, see *Configuring Command Scripts*, 66 for details.

To add a Command Script file:

1. Select a folder where you want to add the new Command Script.
2.  Click  . The **Select Client Script** dialog box is displayed.
3. Select a file in the list.
4. Click **OK**.
A new Command Script is added under the selected folder.

7.6 Managing pre-configured camera sequences



Main window > **Maps and Structure**

You can perform the following tasks for managing camera sequences:

- Create a camera sequence
- Add a step with a new dwell time to an existing camera sequence
- Remove a step from camera sequence
- Delete a camera sequence

Notice!

When the configuration is changed and activated, a camera sequence (pre-configured or automatic) usually is continued after restart of the Operator Client.

But in the following cases the sequence is not continued:

A monitor where the sequence is configured to be displayed has been removed.


The mode of a monitor (single/quad view) where the sequence is configured to be displayed has been changed.

The logical number of a monitor where the sequence is configured to be displayed is changed.







Notice!

After each of the following tasks:

Click  to save the settings.

To create a camera sequence:

1. In the Logical Tree, select a folder where you want to create the camera sequence.

2. .
Click .
The **Sequence Builder** dialog box is displayed.
 3. .
In the **Sequence Builder** dialog box, click .
The **Add Sequence** dialog box is displayed.
 4. Enter the appropriate values.
For detailed information on the various fields, see the Online Help for the appropriate application window.
- Click **OK**.

A new camera sequence  is added.



To add a step with a new dwell time to a camera sequence:

1. Select the desired camera sequence.
2. Click **Add Step**.
The **Add Sequence Step** dialog box is displayed.
3. Make the appropriate settings.
4. Click **OK**.
A new step is added to the camera sequence.

To remove a step from a camera sequence:

- Right-click the desired camera sequence and click **Remove Step**.
The step with the highest number is removed.

To delete a camera sequence:

1. Select the desired camera sequence.
2. .
Click . The selected camera sequence is removed.





7.7 Adding a camera sequence



Main window > **Maps and Structure**

You add a camera sequence to the root directory or to a folder of the Logical Tree.

To add a camera sequence:



1. In the Logical Tree, select a folder where you want to add the new camera sequence.
2. .
Click . The **Sequence Builder** dialog box is displayed.
3. In the list, select a camera sequence.
4. .
Click **Add to Logical Tree**. A new  is added under the selected folder.



7.8 Adding a folder



Main window > **Maps and Structure**

To add a folder:

1. Select a folder where you want to add the new folder.
2. .
Click . A new folder is added under the selected folder.

3.  Click  to rename the folder.
4. Type the new name and press ENTER.

7.9

Adding a map





Main window > **Maps and Structure**

Before you can add a map, you must have map resource files imported.

To import a map resource file see *Managing resource files, 44* for details.

To add a map:

1. Ensure that the map resource file that you want to add has already been imported.
2. Select a folder where you want to add the new map.
3.  Click . The **Select Resource** dialog box is displayed.
4. Select a file in the list.
If the required files are not available in the list, click **Manage...** to display the **Resource Manager** dialog box for importing files.
5. Click **OK**.



A new map  is added under the selected folder.

The map is displayed.

All devices within this folder are displayed in the upper left corner of the map.

7.10





Adding a link to another map



Main window > **Maps and Structure**

After you have added at least two maps, you can add a link on one map to the other so that the user can click from one map to a linked one.

To add a link:

1.  Click a map folder  in the Logical Tree.
2. Right-click the map and click **Create Link**.
The **Select Map for Link** dialog box is displayed.
3.  In the dialog box, click a map .
4. Click **Select**.
5. Drag the item to the appropriate place on the map.

7.11

Assigning a map to a folder



Main window > **Maps and Structure**

Before you can assign maps, you must have map resource files imported.

If required, see *Managing resource files, 44* for details.

To assign a map resource file:

1. Right-click a folder and click **Assign Map**.
The **Select Resource** dialog box is displayed.

2. Select a map resource file in the list.

- 3.

Click **OK**. The selected folder is displayed as .

The map is displayed in the map window.

All items within this folder are displayed in the upper left corner of the map.

7.12 Managing devices on a map



Main window > **Maps and Structure**


Before you can manage devices on a map you must add a map or assign a map to a folder and add devices to this folder.



Notice!

After each of the following tasks:



Click  to save the settings.

To place items on a map:

1. Select a map folder.
2. Drag devices from the Device Tree to the map folder.
The devices of a map folder are located on the left upper corner of the map.
3. Drag the items to the appropriate places on the map.

To remove an item in the Logical Tree only from the map:

1. Right-click the item on the map and click **Invisible**.
The item is removed from the map.
The item remains in the Logical Tree.
2. To make it visible again, right-click the device in the Logical Tree and click **Visible In Map**.

To remove an item from the map and from the Full Logical Tree:

- ▶ Right-click the item in the Logical Tree and click **Remove**.
The item is removed from the map and from the Logical Tree.

To change the icon for the orientation of a camera:

- ▶ Right-click the item, point to **Change Image**, and then click the appropriate icon.
The icon changes accordingly.

To change the color of an item:

- ▶ Right-click the item and click to **Change Color**. Select the appropriate color.
The icon changes accordingly.

7.13 Adding a document



Main window > **Maps and Structure**


You can add text files, HTML files (including MHT files) or an URL file (containing an Internet address) as documents. And you can add a link to another application.

Before you can add a document, you must have document files imported.

To import document files see *Managing resource files*, 44 for details.

To add a map document file:

1. Ensure that the document file that you want to add has already been imported.
2. Select a folder where you want to add the new document.

3. Click . The **Select Resource** dialog box is displayed.
4. Select a file in the list. If the required files are not available in the list, click **Manage...** to display the **Resource Manager** dialog box for importing files.
5. Click **OK**. A new document is added under the selected folder.

8 Configuring schedules



Main window > **Schedules**

There are two schedule types available:

- Recording Schedules
- Task Schedules

You can configure a maximum of 10 different Recording Schedules in the Recording Schedule Table. In these segments the cameras can behave differently. For example, they can have different frame rate and resolution settings (to be configured in the **Cameras and Recording** page). In every point in time, exactly one Recording Schedule is valid. There are no gaps and no overlaps.

You configure Task Schedules for scheduling various events which can occur in your system (to be configured in the **Events** page).

See glossary for definitions of Recording Schedules and Task Schedules.


The schedules are used in other pages of the Configuration Client:

- **Cameras and Recording** page
Used to configure recording.
- **Events** page
Used to determine when events cause logging, alarms, or execution of Command Scripts.
- **User Groups** page
Used to determine when the members of a user group can log on.

Follow these references to get detailed information on the available application windows:

- *Recording Schedules page, 154*
- *Task Schedules page, 154*



Click  to save the settings.



Click  to undo the last setting.



Click  to activate the configuration.

8.1 Configuring a Recording Schedule




Main window > **Schedules**

You can add exception days and holidays to any Recording Schedule. These settings override the normal weekly settings.

The sequence of decreasing priority is: exception days, holidays, weekdays.

The maximum number of Recording Schedules is 10. The first three entries are configured by

default. You can change these settings. Entries with the gray icon  do not have a time period configured.

Recording Schedules share the same weekdays.

Each Standard Task Schedule has its own weekdays patterns.

To configure a Recording Schedule:

1. In the **Recording Schedules** tree, select a schedule.

2. Click the **Weekdays** tab.
3. In the **Schedule Table** field, drag the pointer to select the time periods for the selected schedule. The selected cells are displayed in the color of the selected schedule.

Notes:

- You can mark a time period on a weekday of a Recording Schedule with the color of another Recording Schedule.

8.2 Adding a Task Schedule



Main window > **Schedules**

To add a Task Schedule:

1. Click **Add**.
A new entry is added.
2. Enter the appropriate name.
3. Click **Standard** for a standard Task Schedule or **Recurring** for a recurring Task Schedule. If you change the setting, a message box is displayed. Click **OK** if you want to change the schedule type.

A standard Task Schedule is displayed as , a recurring Task Schedule as .

4. Make the appropriate settings for the selected schedule.

8.3 Configuring a standard Task Schedule



Main window > **Schedules**

Each standard Task Schedule has its own weekdays patterns.

To configure a standard Task Schedule:

1. In the **Task Schedules** tree, select a standard Task Schedule.
2. Click the **Weekdays** tab.
3. In the **Schedule Table** field, drag the pointer to select the time periods for the selected schedule.


8.4 Configuring a recurring Task Schedule



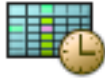
Main window > **Schedules**

Each recurring Task Schedule has its own day pattern.

To configure a recurring Task Schedule:

1. In the **Task Schedules** tree, select a recurring Task Schedule .
2. In the **Recurrence Pattern** field, click the frequency with which you want the Task Schedule to recur (**Daily**, **Weekly**, **Monthly**, **Yearly**) and then make the corresponding settings.
3. In the **Start date** list, select the appropriate start date.
4. In the **Day Pattern** field, drag the pointer to select the appropriate time period.

8.5 Removing a Task Schedule



Main window > > Select an item in the **Task Schedules** tree

To remove a Task Schedule:

1. In the **Task Schedules** tree, select an item.
2. Click **Delete**.

The Task Schedule is deleted. All items that are assigned to this schedule, are not scheduled.

8.6 Adding holidays and exception days



Main window > **Schedules**

Caution!

You can configure empty exception days and holidays. Exception days and holidays replace the schedule of the corresponding week day.

Example:

Old configuration:

Weekday schedule configured to be active from 9:00 to 10:00

Exception day schedule configured to be active from 10:00 to 11:00

Result: activity from 10:00 to 11:00

Same behavior is valid for holidays.



You can add holidays and exception days to a Recording Schedule or to a Task Schedule.

Recording Schedules share the same holidays and exception days.

Each standard Task Schedule has its own holidays or exception days patterns.

To add holidays and exception days to a schedule:

1. In the **Recording Schedules** or **Task Schedules** tree, select a schedule.
2. Click the **Holidays** tab.
3. Click **Add**.
The **Add Holiday(s)** dialog box is displayed.
4. Select one or more holidays and click **OK**.
The selected holidays are added to the Schedule Table.
5. Drag the pointer to select the appropriate time period (this is not possible for Recording Schedules).
The selected cells are cleared and vice versa.
6. Click the **Exception Days** tab.
7. Click **Add**.
The **Add Exception Day(s)** dialog box is displayed.
8. Select one or more special days and click **OK**.
The selected exception days are added to the Schedule Table.
9. Drag the pointer to select the appropriate time period (this is not possible for Recording Schedules).
The selected cells are cleared and vice versa.
The sorting order of the added holidays and exception days is chronological.

Notes:

- You can mark a time period on a holiday or exception day of a Recording Schedule with the color of another Recording Schedule.

8.7**Removing holidays and exception days**

Main window > **Schedules**

You can remove holidays and exception days from a Recording Schedule or a Task Schedule.



To remove holidays and exception days from a Task Schedule:

1. In the **Recording Schedules** or **Task Schedules** tree, select a schedule.
2. Click the **Holidays** tab.
3. Click **Delete**.
The **Select the holidays to delete** dialog box is displayed.
4. Select one or more holidays and click **OK**.
The selected holidays are removed from the Schedule Table.
5. Click the **Exception Days** tab.
6. Click **Delete**.
The **Select the exception days to delete** dialog box is displayed.
7. Select one or more exception days and click **OK**.
The selected exception days are removed from the Schedule Table.

8.8**Renaming a schedule**

Main window >

To rename a schedule:

1. In the **Recording Schedules** or **Task Schedules** tree, select an item.
2. Click .
Click .
3. Enter the new name and press ENTER. The entry is renamed.

9 Configuring cameras and recording settings



Main window > **Cameras and Recording**

This chapter provides information on how to configure the cameras in your Bosch Video Management System.

You configure various camera properties and the recording settings.

Follow these references to get detailed information on the available application windows:

- *Cameras page, 156*
- *Scheduled Recording Settings dialog box (only VRM and Local Storage), 158*
- *Stream Quality Settings dialog box, 160*
- *COM1, 143*
- *PTZ Settings dialog box, 162*
- *Copy Recording Settings dialog box (NVR only)*

►



Click to save the settings.

►



Click to undo the last setting.

►



Click to activate the configuration.

9.1 Copying and pasting in tables

You can configure many objects simultaneously within a Camera Table, an Event Configuration Table, or an Alarm Configuration Table.

You can copy the configurable values of a table row in other rows:

- Copy all values of a row to other rows.
- Copy only one value of a row to another row.
- Copy the value of one cell to a complete column.

You can copy the values in two different ways:

- Copy into the clipboard and then paste.
- Direct copy and paste.

You can determine in which rows to paste:

- Copy in all rows.
- Copy in selected rows.

To copy and paste all configurable values of a row into another row:

1. Right-click the row with the desired values and click **Copy Row**.
2. Click the row heading of the row that you want to modify.
To select more than one row press the CTRL key and point to the other row headings.
3. Right-click the table and click **Paste**.
The values are copied.

To copy and paste one value of a row into another row:

1. Right-click the row with the desired values and click **Copy Row**.
2. Right-click the cell that you want to modify, point to **Paste Cell to**, and click **Current Cell**.
The value is copied.

To copy all configurable values directly:

1. Click the row heading of the row that you want to modify.
To select more than one row press the CTRL key and point to the other row headings.

- Right-click the row with the desired values, point to **Copy Row to**, and click **Selected Rows**.

The values are copied.

To copy one value directly:

- Click the row heading of the row that you want to modify.
To select more than one row press the CTRL key and point to the other row headings.
- Right-click the cell with the desired value, point to **Copy Cell to**, and click **Selection in Column**.

The value is copied.

To copy a value of a cell to all other cells in this column:

- Right-click the cell with the desired value, point to **Copy Cell to**, and click **Complete Column**.

The value is copied.

To duplicate a row:


- Right-click the row and click **Add Duplicated Row**.

The row is added below with a new name.


9.2

Configuring stream quality settings

To add a stream quality settings entry:

- Click  to add a new entry in the list.
- Type in a name.

To remove a stream quality settings entry:

- Select an entry in the list and click  to delete the entry.
You cannot delete default entries.

To rename a stream quality settings entry:

- Select an entry in the list.
- Enter the new name in the **Name:** field.
You cannot rename default entries.
- Click **OK**.

To configure stream quality settings:

- Select an entry in the list.
- Make the appropriate settings.

For detailed information on the various fields, see the Online Help for the appropriate application window.

9.3

Configuring camera properties



Main window > **Cameras and Recording** >

To change camera properties:


- In the **Camera** column, click a cell and type a new name for the camera.
This name is displayed in all other places where cameras are listed.
- Only for VRM and **Live Only**: In the **Stream 1 - Codec** or **Stream 2 - Codec** column, select the appropriate codec for encoding stream 1 or stream 2.
- Only for VRM and **Live Only**: In the **Live Video** column, configure the quality of live display. For these devices, you can only set the live quality per camera, not per schedule.
- Make the appropriate settings in the other columns.

For detailed information on the various fields, see the Online Help for the appropriate application window.


9.4

Configuring recording settings (only VRM and Local Storage)

To add a recording settings entry:

1. Click  to add a new entry in the list.
2. Type in a name.



To remove a recording settings entry:

- ▶ Select an entry in the list and click  to delete the entry.
You cannot delete default entries.

To rename a recording settings entry:




1. Select an entry in the list.
2. Enter the new name in the **Name:** field.
You cannot rename default entries.
3. Click **OK**.

To configure recording settings:

1. Select an entry in the list.
 2. Make the appropriate settings and click **OK**.
 3. Click  or .
 4. In the **Recording** column, select the desired recording setting for each encoder.
- For detailed information on the various fields, see the Online Help for the appropriate application window.

9.5

Configuring recording settings (only NVR)

Main window >  **Cameras and Recording** > Click  > Click a Recording Schedule tab (for example )

Before you configure the recording settings, configure the stream quality levels.

Note: For recording, ensure that the corresponding NVR is configured properly (**Devices** >

Expand  >  > **Disk Storage** tab).



**Notice!**

For all encoders, live view settings are also used for pre-event recording.









For encoders that support dual-streaming, the settings for live/pre-event recording, motion recording, and alarm recording are all configured independently.

For encoders that support only a single stream (e.g., the VideoJet 8004), live viewing and recording use the same stream. In this case, the recording settings take priority, so the live view uses the stream quality settings for continuous, motion, and alarm recording. You can enter a setting for live/pre-event only if continuous recording is disabled.

You can switch the live stream from stream 2 (default) to stream 1 for a workstation (**Devi-**

ces > Expand  >  > **Settings** tab > **Override recording settings**) or for an encoder. This setting does not affect pre-event recording.

To configure recording settings:

1. In the  column of **Continuous Recording**, select the desired stream quality or disable continuous recording.
2. In the  column, select a check box to activate audio.
3. In the  column of **Live/Pre-event Recording**, select the desired stream quality or select stream 1.
4. In the  column, select a check box to activate audio.
5. In the  column of **Motion Recording**, select the desired stream quality or disable motion recording.
6. In the  column, select a check box to activate audio.
7. In the **Pre-event [s]** column, click a cell and type the appropriate time.
8. In the **Post-event [s]** column, click a cell and type the appropriate time.
9. In the  column of **Alarm Recording**, select the desired stream quality or disable alarm recording.
10. In the  column, select a check box to activate audio.
11. In the **Pre-event [s]** column, click a cell and type the appropriate time.
12. In the **Post-event [s]** column, click a cell and type the appropriate time.

**Notice!**

If pre-event time for motion recording and pre-event time for alarm recording differ, the higher value is used for both.

If the configured pre-event time would overlap a preceding alarm or motion recording, the pre-event recording starts after the preceding recording is finished.

For detailed information on the various fields, see the Online Help for the appropriate application window.

9.6**Configuring port settings**

Main window >  **Devices** > Expand  > Expand  > Expand  >  > **Interfaces** tab > **Periphery** tab

or

Main window >  **Devices** > Expand  > Expand  >  > **Interfaces** tab > **Periphery** tab

or

Main window >  **Devices** >  >  > **Interfaces** tab > **Periphery** tab

You can only configure port settings for an encoder where the control of the camera is available and activated.

When the encoder or PTZ camera is exchanged, the port settings are not retained. You must again configure them.

After a firmware update check the port settings.

To configure the port settings of an encoder:

- ▶ Make the appropriate settings.
The settings are valid immediately after saving. You do not have to activate the configuration.

For detailed information on the various fields, see the Online Help for the appropriate application window.

9.7


Configuring PTZ camera settings

Main window >  **Cameras and Recording** > 

First configure the port settings of your PTZ camera before you can configure the PTZ camera settings. Otherwise the PTZ control is not working in this dialog box.

To configure a control of a camera:

1. In the Camera Table, select the required encoder.
- 2.

To activate the control of a camera: In the  column, select the check box.

3. Click the  button.

The dialog box for configuring PTZ settings is displayed.

4. Make the appropriate settings.

For detailed information on the various fields, see the Online Help for the appropriate application window.

- ▶ Click **OK**.

10 Configuring events and alarms



Main window > **Events**
or



Main window > **Alarms**

This chapter provides information on how to configure events and alarms in your system.

The available events are grouped beyond their corresponding devices.

In the **Events** page, you configure when an event in your Bosch Video Management System triggers an alarm, executes a Command Script, and is logged.

Example (part of an Event Configuration Table):

Camera

Connection State

Motion Detection

Recording Mode

Reference Image Check

Video Analysis 01

Video Analysis 02

Video Analysis 03

Video Analysis 04

Video Analysis 05

Video Analysis 06

Video Analysis 07

Video Analysis 08

Video Analysis 09

Video Analysis 10

Video Analysis 11

Video Analysis 12

Video Analysis 13

Video Analysis 14

Video Analysis 15

Video Analysis 16

Video Loss

Video Signal Lost

Video Signal OK

Video Signal State Unknown

Settings for 'Video Signal Lost'						
	Device	Network	Trigger Alarm	Log	Script	
	Name	Address	Schedule	Schedule	Script	Schedule
▶	Camera 1	172.26.4...	<input checked="" type="radio"/> Always	<input checked="" type="radio"/> Always	<none>	<input checked="" type="radio"/> Never
	Camera 2	172.26.4...	<input checked="" type="radio"/> Always	<input checked="" type="radio"/> Always	<none>	<input checked="" type="radio"/> Never
	Camera 3	172.26.4...	<input checked="" type="radio"/> Always	<input checked="" type="radio"/> Always	<none>	<input checked="" type="radio"/> Never
	Camera 4	172.26.4...	<input checked="" type="radio"/> Always	<input checked="" type="radio"/> Always	<none>	<input checked="" type="radio"/> Never

This example means:




If the video signal of the selected camera gets lost, an alarm is triggered, the event is logged, and no script is executed.

In **Alarms**, you define how an alarm is displayed, and which cameras are displayed and recorded in case of an alarm.

Some system events are configured as alarms by default.

Follow these references to get detailed information on the available application windows:

- *Command Script Editor dialog box*, 164
- *Create Compound Event / Edit Compound Event dialog box*, 165
- *Select Script Language dialog box*, 165
- *Alarm Settings dialog box*, 168
- *Select Image Pane Content dialog box*, 168
- *Alarm Options dialog box*, 169

- ▶ Click  to save the settings.
- ▶ Click  to undo the last setting.
- ▶ Click  to activate the configuration.

10.1 Copying and pasting in tables

You can configure many objects simultaneously within a Camera Table, an Event Configuration Table, or an Alarm Configuration Table with a few clicks.

For detailed information, see *Copying and pasting in tables*, 55.

10.2 Removing a table row



Main window > **Alarms**

You can only remove a table row that you or another user have added, i.e. you can delete duplicated events or Compound Events.

Compound Events are located in the Event Tree under **System Devices > Compound Events**.

To remove a table row:

1. Select the row.
- 2.

Click .

10.3 Managing resource files

For detailed information see:

- *Managing resource files*, 44.

10.4 Configuring an event



Main window > **Events**

To configure an event:

1. In the tree, select an event or event state, for example **System Devices > Authentication > Operator Authentication Rejected**.
The corresponding Event Configuration Table is displayed.
2. In the **Trigger Alarm - Schedule** column, click a cell and select the appropriate schedule.
The schedule determines when the alarm is triggered.
Select one of the Recording Schedules or Task Schedules that you have configured in the **Schedules** page.
3. In the **Log - Schedule** column, click a cell and select the appropriate schedule.
The schedule determines when the event is logged.
4. In the **Script - Script** column, click a cell and select an appropriate Command Script.
5. In the **Script - Schedule** column, click a cell and select the appropriate schedule.
The schedule determines when the event triggers the start of the Command Script.


10.5 Duplicating an event



Main window > **Events**

You can duplicate an event to trigger different alarms for a particular event.

To duplicate an event:

1. In the tree, select an event condition. The corresponding Event Configuration Table is displayed.
2. Select a table row.
3. Click . A new table row is added below. It has the default settings.

10.6 Logging user events



Main window > **Events** > Expand **System Devices** > **User Actions**

You can configure the logging behavior of several user actions for each available user group individually.

Example:

To log user events:

1. Select a user event to configure its logging behavior, e.g. **Operator Logon**.
The corresponding Event Configuration Table is displayed.
Each user group is displayed in the **Device** column.
2. If available: In the **Trigger Alarm - Schedule** column, click a cell and select the appropriate schedule.
The schedule determines when the alarm that is supposed to notify the user is triggered. You can select one of the Recording Schedules or Task Schedules that you have configured in **Schedules**.
3. In the **Log - Schedule** column, click a cell and select the appropriate schedule.
The schedule determines when the event is logged.
In the example, the Operator logon of the Admin Group and the Power User Group are not logged whereas the Operator logon of the Live User Group are logged during **Day** schedule.

10.7 Configuring user event buttons



Main window > **Events**

You can configure the user event buttons available in the Operator Client. You can configure that one or more user event buttons are not displayed in the Operator Client.

On the **User Groups** page, you configure that the user event buttons are only available in the Operator Client of the corresponding user group.

To configure user event buttons:

1. In the tree, select **System Devices** > **Operator Client Event Buttons** > **Event Button Pressed**.
The corresponding Event Configuration Table is displayed.
2. Select a user event button to configure its behavior.
3. In the **Trigger Alarm - Schedule** column, click a cell and select the appropriate schedule.
The schedule determines when the alarm that is supposed to notify the user is triggered.

4. In the **Log - Schedule** column, click a cell and select the appropriate schedule.
The schedule determines when the event is logged.
Selecting **Never** makes the user event button unavailable in the Operator Client of all user groups that have the user event button permission.
5. In the **Script - Script** column, click a cell and select an appropriate Command Script.
6. In the **Script - Schedule** column, click a cell and select the appropriate schedule.
The schedule determines when the Command Script is executed.

10.8 Creating a Compound Event

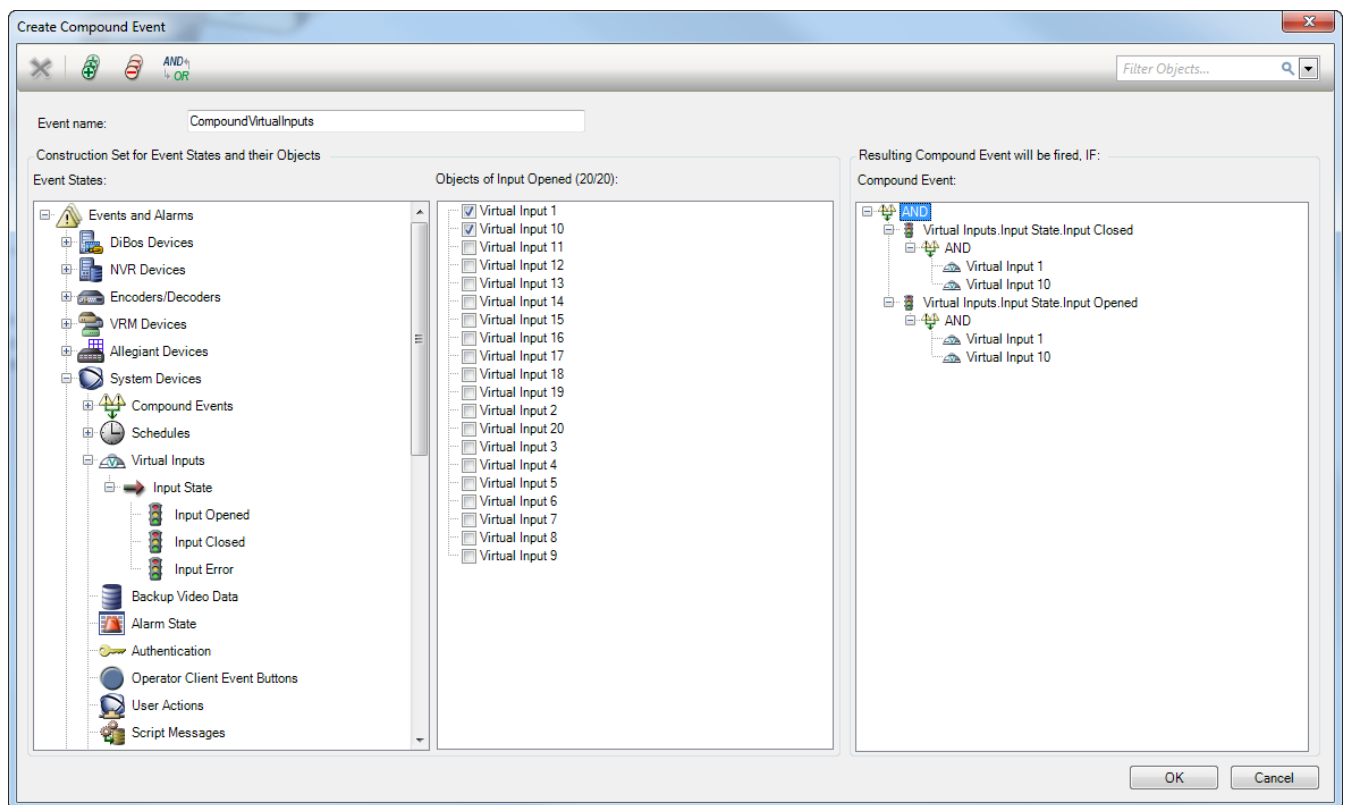


Main window >

Events >

You create a Compound Event. You can combine only state changes and their objects. Objects can be for example schedules or devices. You can combine both the state changes and their objects with the Boolean expressions AND and OR.

Example: You combine the connection states of an IP camera and a decoder. The Compound Event shall only occur when both the devices lose their connection. In this case you use the AND operator for the two objects (the IP camera and the decoder) and for the two connection states **Video Signal Lost** and **Disconnected**.



To create a Compound Event:

1. In the **Event name:** field, enter a name for the Compound Event.
2. In the **Event States:** field, select an event state.
The available objects are displayed in the **Objects:** field.
3. In the **Objects:** field select device as required.
The corresponding event and the selected devices are added to the Compound Event pane.

4. In the **Compound Event:** field, right-click a Boolean operation and change it where required.
A Boolean operation defines the combination of its immediate child elements.
5. Click **OK**.
The new Compound Event is added to the Event Configuration Table. You find it in the Event Tree below **System Devices**.

10.9 Editing a Compound Event



Main window > **Events**

You can change a previously created Compound Event.

To edit a Compound Event:

1. In the Event Tree, expand **System Devices > Compound Event State > Compound Event is True**.
2. In the Event Configuration Table, in the **Device** column, right-click the required Compound Event and click **Edit**.
The **Edit Compound Event** dialog box is displayed.
3. Make the required changes.
4. Click **OK**.
The Compound Event is changed.

10.10 Configuring an alarm



Main window > **Alarms**

Before configuring an alarm you must configure the trigger in **Events**.

To configure an alarm:

1. In the tree, select an alarm, for example **System Devices > Authentication > Operator Authentication Rejected**.
The corresponding Alarm Configuration Table is displayed.
2. In the **Priority** column, click ... in a cell to type the alarm priority for the selected alarm (100 is low priority, 1 is high priority).
In the **Title** column, click ... in a cell to type the title of the alarm to be displayed in Bosch Video Management System, for example in the Alarm List.
In the **Color** column, click ... in a cell to display a dialog box for selecting a color for the alarm to be displayed in the Operator Client, for example in the Alarm List.
3. In the 1-5 columns, click ... in a cell to display the **Select Image Pane Content** dialog box. Make the required settings.
4. In the **Audio File** column, click ... in a cell to display a dialog box for selecting an audio file that is played in case of an alarm.
5. In the **Alarm Options** column, click ... in a cell to display the **Alarm Options** dialog box. This dialog box allows you to configure the following settings for alarms:
 - Cameras that start recording in case of an alarm
 - Triggering PTZ commands in case of alarm
 - Notifications that are sent in case of an alarm
 - Workflow that has to be processed in case of an alarm
 - Assigning cameras that are displayed in analog monitor groups in case of an alarm.

For detailed information on the various fields, see the Online Help for the appropriate application window.

10.11 Configuring settings for all alarms



Main window > **Alarms**

You can set the following alarm settings that are valid for this Management Server:

- Number of Image panes per alarm
- Auto-clear time
- Manual alarm recording time
- Configure the behavior of all analog monitor groups

To configure all alarms:

1.



Click

The **Alarm Settings** dialog box is displayed.







2. Make the appropriate settings.

For detailed information on the various fields, see the Online Help for the appropriate application window.

- ▶ Click **OK**.

11 Configuring Command Scripts

This chapter describes how to configure Command Scripts. Command Scripts appear at various places of Bosch Video Management System.

- ▶  Click  to save the settings.
- ▶  Click  to undo the last setting.
- ▶  Click  to activate the configuration.

11.1 Managing Command Scripts

Main window

You can create a Command Script using the following scripting languages:

- C#
- VB.Net

You cannot change the scripting language of an existing Command Script.

You can create a Client Script or a Server Script.

You can add scriptlets to every script.

To get help on entering code, click  in the **Command Script Editor** dialog box. The Bosch Script API help is displayed.


To add a server scriptlet:

1. On the **Tools** menu, click the **Command Script Editor...** command.
The **Select Script Language** dialog box is displayed if no Command Script was created yet.
2. In the **Script Language:** list, select the required entry.
The **Command Script Editor** dialog box is displayed.
3. In the left pane of the **Command Script Editor** dialog box, right-click ServerScript and click **New Scriptlet**.
A new scriptlet is added.
4. Enter your code.

To add a client scriptlet

1. On the **Tools** menu, click the **Command Script Editor...** command.
The **Select Script Language** dialog box is displayed if no Command Script was created yet.
2. In the **Script Language:** list, select the required entry.
The **Command Script Editor** dialog box is displayed.
3. In the left pane of the **Command Script Editor** dialog box, right-click ClientScript and click **New Scriptlet**.
A new scriptlet is added.
4. Enter your code.

To delete a scriptlet:

1. Open the **Command Script Editor** dialog box.
2. Click the **Server Script** tab or the **Client Script** tab as required.
3. In the Event Tree, right-click the required event and click .
The scriptlet is removed.

To exit the Command Script Editor dialog box:



11.2 Configuring a Command Script to be started automatically



Main window > **Alarms** > or > **Alarm Options** column > ...

You configure a Client Command Script to be started in the following cases:

- Workstation starts up.
- User accepts an alarm.

To configure a Command Script at workstation startup:

See *Configuring a startup Command Script*, 34.

To configure a Command Script after user has accepted an alarm:

1. Click the **Workflow** tab.
2. In the **Execute the following Client Script when alarm is accepted:** list, select the desired Client Script.

This script is started as soon as a user accepts the selected alarm.

11.3 Importing a Command Script

Main window

You can import Command Scripts that have been developed on another computer. The file must be written in the same scripting language that you used on your system.

To import a Command Script:

1. On the **Tools** menu, click the **Command Script Editor...** command.
The **Command Script Editor** dialog box is displayed.



The dialog box for opening a file is displayed.

3. Select the required script file and click **OK**.

11.4 Exporting a Command Script

Main window

You can export Command Scripts that have been developed on another computer.

To export a Command Script:

1. On the **Tools** menu, click the **Command Script Editor...** command.
The **Command Script Editor** dialog box is displayed.



The dialog box for saving a file is displayed.

3. Type the required script file name and click **OK**.

11.5 Configuring a startup Command Script



Main window > **Devices** > Expand > > **Settings** page

You configure a Command Script to be started when the Operator Client on the selected workstation is started.

You must create a corresponding Command Script.

For creating a Command Script, see *Managing Command Scripts*, 66.

To configure a startup script:

- ▶ In the **Startup script:** list, select the required Command Script.

12 Configuring users, permissions and Enterprise Access



Main window > **User Groups**

This chapter provides information on how to configure user groups, Enterprise User Groups and Enterprise Access. You make all settings per user group and not per user. A user can only be the member of one user group or Enterprise User Group.




You cannot change the settings of a default user group.

This user group has access to all the devices of the Full Logical Tree and is assigned the **Always** schedule.

For accessing the Windows user groups of a domain, LDAP user groups are used.

Follow these references to get detailed information on the available application windows:

- *User Properties page, 175*
- *Add New User Group/Account dialog box, 173*
- *User Group Properties page, 174*
- *Add New Dual Authorization Group dialog box, 175*
- *LDAP Server Settings dialog box, 179*
- *Copy User Group Permissions dialog box, 178*
- *Select User Groups dialog box, 176*
- *Logical Tree page, 182*
- *Events and Alarms page, 179*
- *Operator Features page, 182*
- *Priorities page, 184*
- *Camera Permissions page, 177*
- *Decoder Permissions page, 179*
- *User Interface page, 184*

1.  Click to save the settings.
2.  Click to undo the last setting.
3.  Click to activate the configuration.

See also

- *Add New Dual Authorization Group dialog box, 175*
- *Add New User Group/Account dialog box, 173*

12.1 Creating a user



Main window > **User Groups > User Groups** tab
or




Main window > **User Groups > Enterprise User Groups** tab

You create a user as a new member of an existing user group or Enterprise User Group.

**Notice!**

A user who wants to operate a CCTV keyboard must have a number-only user name and password. The user name can have maximum 3 numbers; the password can have maximum 6 numbers.

To create a user:

1. Select a group and click .
A new user is added to the **User Groups** tree.
2. Right-click the new user and click **Rename**.
3. Enter the desired name and press ENTER.
4. On the **User Properties** page, enter the user name and the password.

12.2**Creating a group or account**

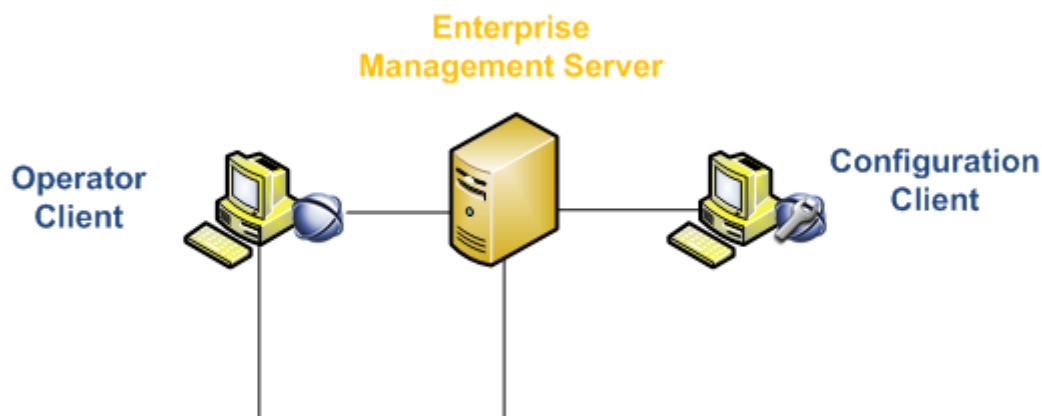
Main window > **User Groups**

You can create a standard user group, an Enterprise User Group or an Enterprise Account. For adapting the user group permissions to your requirements, create a new user group and change its settings.

You perform the task of creating an Enterprise User Group for an Enterprise Management system on the Enterprise Management Server.

You create an Enterprise User Group with users to configure their operating permissions. These operating permissions are available on an Operator Client that is connected to the Enterprise Management Server. An example of an operating permission is the user interface of the alarm monitor.

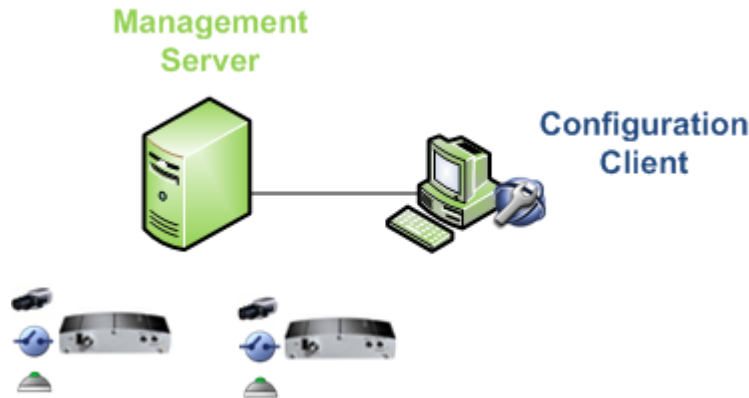
The following illustration shows the part of the scenario where you perform this task:




You perform the task of creating an Enterprise Account on a Management Server. Repeat this task on each Management Server that is a member of your Enterprise System.

You create an Enterprise Account to configure the device permissions for an Operator Client using an Enterprise System.

The following illustration shows the part of the scenario where you perform this task:



To create a group or account:

1. Click the desired tab for the group or account that you want to add:
 - **User Groups**
 - Enterprise User Groups
 - Enterprise Access
2. Click . The appropriate dialog box is displayed.
3. Type in the name and a description.
4. For an Enterprise Account enter a password and confirm this password.
5. Click **OK**. A new group or account is added to the corresponding tree.



For detailed information on the various fields, see the Online Help for the appropriate application window.



See also

- *Enterprise System, 188*
- *User Group Properties page, 174*
- *Credentials page, 181*
- *Server Access page, 185*
- *Add New Dual Authorization Group dialog box, 175*
- *Add New User Group/Account dialog box, 173*

12.3

Creating a dual authorization group



Main window >  **User Groups > User Groups tab >  > New Dual Authorization Group** dialog box
or

Main window >  **User Groups > Enterprise User Groups tab >  > New Enterprise Dual Authorization Group** dialog box

You select two groups. The members of these groups are the members of the new dual authorization group.

You can configure dual authorization for user groups and for Enterprise User Groups.

To create:

1. Type in a name and description.
2.  Click . The appropriate dialog box is displayed.
3. Select a group in each list.
It is possible to select the same group in the second list.
4. For each group, select **Force dual authorization** if required.
When this check box is selected, each user of the first group can only log on together with a user of the second group.
When this check box is cleared, each user of the first group can log on alone but he only has the access rights of his group.

See also

- *Logon Pair Properties page, 176*
- *Add New Dual Authorization Group dialog box, 175*
- *Select User Groups dialog box, 176*

12.4**Configuring LDAP settings**

Main window > **User Groups > User Groups tab > Operating Permissions**
or



Main window > **User Groups > Enterprise User Groups tab > Operating Permissions**

Caution!

Do not assign an LDAP group to different Bosch Video Management System user groups. This can result in not intended permissions for these users.

**Notice!**

Type the search paths accurately. Wrong paths can make the search on an LDAP server very slow.

You configure LDAP groups in standard user groups or Enterprise User Groups.

To configure LDAP settings:

1. Click the **User Group Properties** tab.
 2. In the **LDAP Properties** field, make the appropriate settings.
- For detailed information on the various fields, see the Online Help for the appropriate application window.

12.5**Associating an LDAP group**

Main window > **User Groups > User Groups tab > Operating Permissions**
or



Main window > **User Groups** > Enterprise User Groups tab > **Operating Permissions**

You associate an LDAP group with a Bosch Video Management System user group to give the users of this LDAP group access to the Operator Client. The users of the LDAP group have the access rights of the user group where you configure the LDAP group.

You probably need the help of the IT administrator who is responsible for the LDAP server.

You configure LDAP groups in standard user groups or Enterprise User Groups.

To associate an LDAP group:

1. Click the **User Group Properties** tab.
2. In the **LDAP Properties** field, click **Settings**.
The **LDAP Server Settings** dialog box is displayed.
3. Enter the settings of your LDAP server and click **OK**.

For detailed information on the various fields, see the Online Help for the appropriate application window.

- ▶ In the **LDAP Groups:** list, double-click an LDAP group.
This LDAP group is entered in the **Associated LDAP group:** field.

12.6

Scheduling user logon permission



Main window > **User Groups** > **User Groups** tab > **Operating Permissions**
or



Main window > **User Groups** > Enterprise User Groups tab > **Operating Permissions**

You can limit the members of a user group or Enterprise User Group to log on to their computers at specified time periods.

You cannot change these settings for a default user group.

To schedule logging on:

1. Click the **User Group Properties** tab.
2. In the **Logon schedule:** list, select a schedule.

12.7

Configuring operating permissions



Main window > **User Groups** > **User Groups** tab > **Operating Permissions**
or



Main window > **User Groups** > Enterprise User Groups tab > **Operating Permissions**

You can configure operating permissions like Logbook access.

You cannot change these settings for a default user group.

You configure operating permissions in standard user groups or Enterprise User Groups.

To configure operating permissions:

1. Click the **Operator Features** tab.
2. Select or clear the check boxes as appropriate.

For detailed information on the various fields, see the Online Help for the appropriate application window.

12.8 Configuring user interface settings



Main window > **User Groups > User Groups tab > Operating Permissions**
or



Main window > **User Groups > Enterprise User Groups tab > Operating Permissions**

You can configure a multi monitor mode with up to 4 monitors. You set for every monitor what is displayed on it, e.g. monitor 2 only displays Live Image panes or Monitor 1 and Monitor 2 use the 16:9 aspect ratio for HD cameras.

You configure operating permissions in standard user groups or Enterprise User Groups.

To configure user interface settings:

1. Click the **User Interface** tab.
2. In the 4 monitor list, select the required entries.
If you click **Restore Default**, all list entries are reset to their default settings.
3. If required, select the **Save settings when shutting down** check box to enable the user to save his individual settings when shutting down the Operator Client.

12.9 Configuring permissions for Logical Tree



Main window > **User Groups > User Groups tab > Device Permissions**
or



Main window > **User Groups > Enterprise Access tab > Device Permissions**

You can set the permissions for all devices of the Logical Tree independently.

In an Enterprise System, these permissions are valid for the access of Enterprise User Group users to the devices of a local Management Server, controlled by Enterprise Accounts.

After you have moved permitted devices to a folder that is not permitted for this user group, you must set the permissions for the folder to grant access to its devices.

You cannot change these settings for a default user group.

You configure device permissions in standard user groups or Enterprise Accounts.

To configure permissions:

1. In the User Groups tree, select a user group or account.
2. Click the **Logical Tree** tab.
3. Select or clear the check boxes as appropriate.
Selecting an item below a node, automatically selects the node.
Selecting a node, automatically selects all items below.

For detailed information on the various fields, see the Online Help for the appropriate application window.

12.10 Configuring permissions for events and alarms



Main window > **User Groups > User Groups tab > Device Permissions**
or



Main window > **User Groups > Enterprise Access tab > Device Permissions**

You configure which events the user group or account is authorized to process.

You cannot change these settings for a default user group.

You configure permissions for events and alarms in standard user groups or Enterprise Accounts.

To configure permission for events and alarms:

1. In the User Groups tree, select a user group or account.
2. Click the **Events and Alarms** tab.
3. Select the check box to enable all available events and alarms.

Or:

Select the required check boxes to enable the appropriate events and alarms.

12.11 Configuring camera permissions

Main window > **User Groups > User Groups tab > Device Permissions**
or



Main window > **User Groups > Enterprise Access tab > Device Permissions**

You can configure various permissions for cameras, e.g. PTZ control.

You cannot change these settings for a default user group.

You configure camera permissions in standard user groups or Enterprise Accounts.

To configure camera permissions:

1. In the User Groups tree, select a user group or account.
2. Click the **Camera Permissions** tab.
3. Select or clear the check boxes as appropriate.

For detailed information on the various fields, see the Online Help for the appropriate application window.

12.12 Configuring decoder permissions

Main window > **User Groups > User Groups tab > Device Permissions**
or



Main window > **User Groups > Enterprise Access tab > Device Permissions**

You can configure permissions for decoders.


You cannot change these settings for a default group.


You configure decoder permissions in standard user groups or Enterprise Accounts.


To configure decoder permissions:

1. In the User Groups tree, select a user group or account.
2. Click the **Decoder Permissions** tab.
3. Select or clear the check boxes as appropriate.

12.13 Configuring various priorities

Main window >  **User Groups > User Groups tab**
or

Main window >  **User Groups > Enterprise User Groups tab**
or

Main window >  **User Groups > Enterprise Access tab**
You can configure the following priorities:

- For standard user groups and Enterprise User Groups: You can configure the alarm priorities for Live Mode and Playback Mode.
- For standard user groups and Enterprise Access: You can configure the priorities for acquiring PTZ controls and Bosch Allegiant trunk lines.
You can configure a time period for PTZ locking, i.e. a user with higher priority can take over the camera control from a user with a lower priority and locks it for this time period.

To configure live and playback priorities:


1. Select a standard user group or an Enterprise User Group.
2. Click **Operating Permissions**.
3. Click the **Priorities** tab.
4. In the **Automatic Popup Behavior** field, move the sliders as required.

To configure priorities for PTZ and Bosch Allegiant trunk lines:

1. Select a standard user group or an Enterprise Account.
2. Click **Device Permissions**.
3. Click the **Control Priorities** tab.
4. In the **Control Priorities** field, move the sliders as required.
5. In the **Timeout in min.** list, select the required entry.

12.14 Copying user group permissions

Main window >  **User Groups > User Groups tab**
or

Main window >  **User Groups > Enterprise User Groups tab**
or

Main window >  **User Groups > Enterprise Access tab**
You can copy permissions from one group or account to another. You must have configured at least 2 groups or accounts.

To copy permissions:

1. In the User Groups tree, select a group or account.

2.



Click

The **Copy User Group Permissions** dialog box is displayed.

3. Select the appropriate permissions and the appropriate target group or account.
4. Click **OK**. The group permissions of this group are copied to the other group or account.
The dialog box is closed.

13 Managing configuration data

Main window

You must activate the current configuration to make it valid for the Management Server and Operator Client. The system reminds you to activate when exiting the Configuration Client. Every activated configuration is saved with the date and with a description if required.

At every point in time you can restore a recently activated configuration. All configurations saved in the meantime get lost.

And you can export the current configuration in a configuration file and import this file later. This restores the exported configuration. All configurations saved in the meantime get lost.

Offline configuration

You can import an exported configuration on an offline computer with Bosch Video Management System installed, change some configuration settings, and export this in a new configuration file again. This file you import in the online computer again.

Follow these references to get detailed information on the available application windows:

- *Activation Manager dialog box*, 91
- *Activate Configuration dialog box*, 92
- *License Manager dialog box*, 92
- *License Activation dialog box*, 92
- *Alarm Settings dialog box*, 93
- *Stream Quality Settings dialog box*, 93
- *Options dialog box*, 94

13.1 Activating the working configuration

Main window

You activate the currently working configuration. The Operator Client uses the activated configuration after the next start if the user accepted it. If the activation is enforced, all open instances of the Operator Client in the network exit and start again. The user of each Operator Client instance usually does not have to log on again. A new logon is only necessary if an automatic restart and relogin happened 3 times or more during the last hour.

You can configure a delayed activation time. If you configure a delayed activation time, the working configuration is not activated at once but at the time configured. If you configure another activation time later (delayed or not does not matter), this time is active now. The first configured activation time is removed.

When you exit the Configuration Client the system reminds you to activate the current working copy of the configuration.



Notice!

If the activation is enforced, each instance of Operator Client restarts when the configuration is activated. Avoid unnecessary activations. Perform activations preferably in the night or during time periods with low activities.

To activate the currently working configuration:

1.



Click .

The **Activate Configuration** dialog box is displayed.

2. If appropriate, enter a delayed activation time. As per default, the present point in time is configured as activation time. If you do not change the delayed activation time, the activation is performed immediately.

If appropriate, click to check **Force activation for all Operator Clients**.

3. Type a description and click **OK**.
The current configuration is activated.
Each Operator Client workstation is instantly restarted, if connected to the network and the activation is enforced. If a workstation is not connected, it is restarted as soon it is connected again.
If you configured a delayed activation time, the configuration will be activated later.

13.2 Activating a configuration

Main window

You can activate a previous version of the configuration that you have saved earlier.

To activate a configuration:

1. On the **System** menu, click **Activation Manager...**
The **Activation Manager** dialog box is displayed.
2. In the list, select the configuration you want to activate.
3. Click **Activate**.
A message box is displayed.
4. Click **OK**.
The **Activate Configuration** dialog box is displayed.
5. If appropriate, click to check **Force activation for all Operator Clients**. Each Operator Client workstation is automatically restarted to activate the new configuration. The user cannot refuse the new configuration.
If **Force activation for all Operator Clients** is not checked, on each Operator Client workstation a dialog box appears for some seconds. The user can refuse or accept the new configuration. The dialog box is closed after a few seconds without user interaction.
In this case the new configuration is not accepted.

13.3 Exporting configuration data

Main window

You can export the device configuration data of Bosch Video Management System in a database file and the user data in a .zip file. You can use this functionality for data backup. You can use these files for restoring a system configuration.

Caution!

Stop Bosch Video Management System Management Server service before you copy the exported configuration file.

To export configuration data:

1. On the **System** menu, click **Activation Manager...**
The **Activation Manager** dialog box is displayed.
2. Click **Export**.
3. Enter a filename.
The current configuration is exported. A .bvms file with configuration data and a .zip file with the user data is created.

13.4 Exporting configuration data to OPC

Main window

You can export the device configuration data of Bosch Video Management System in an XML file to import it in an OPC Server application. The file must be stored in the bin directory of your Bosch Video Management System installation.

For configuring a Bosch VMS - BIS connection the Bosch VMS - BIS Interface Configuration Manual is available.

Caution!

Install OPC server and Bosch Video Management System Management Server on different computers.

If both the servers run on the same computer, the performance of the systems is reduced. Additionally serious software crashes can appear.

To export configuration data:

1. On the **System** menu, click **Export Device Information for OPC....**
The **Export Device Information File** dialog box is displayed.
2. Enter a file name and click **Save**.
The file is saved.
You can import this file in your OPC server application.

14 Configuration examples

This chapter contains examples on how to configure selected devices in Bosch Video Management System.

14.1 Creating an Enterprise System

You perform the tasks for creating an Enterprise System on a Enterprise Management Server and on multiple Management Server computers.

This example covers the Scenario 1 described in the *Enterprise System, 188* chapter:

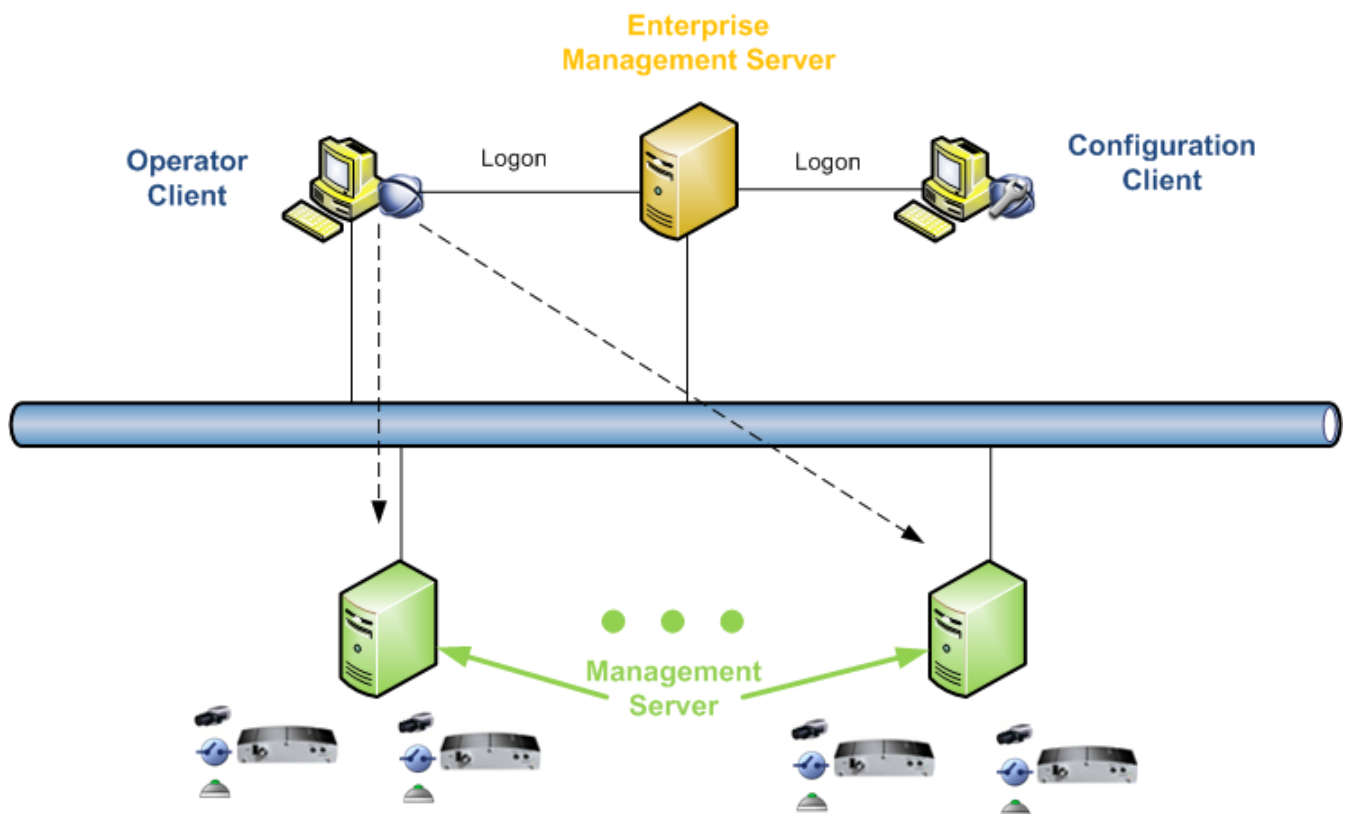


Figure 14.1: Enterprise Scenario 1

You need valid licenses for using an Enterprise System.

See also

- *Enterprise System, 188*
- *Licensing, 191*

14.1.1 Adding multiple Management Server computers

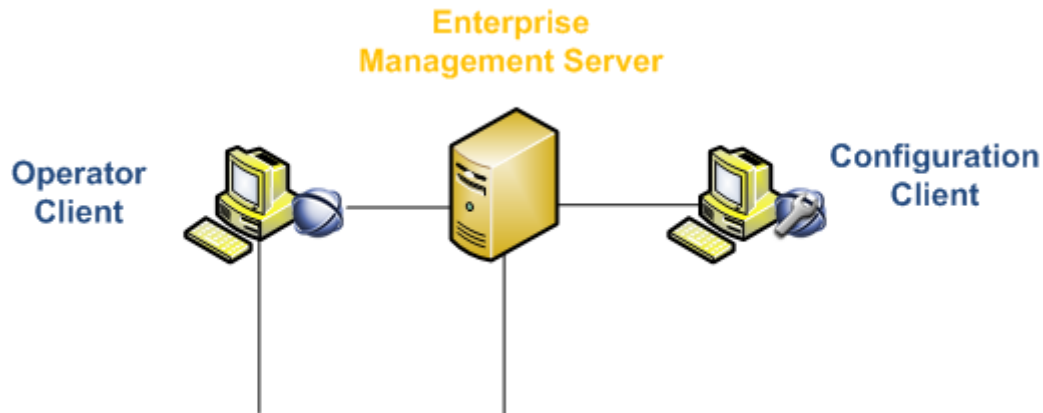


Main window > **Devices > Enterprise System > Server List**

You perform this task of adding multiple Management Server computers in Configuration Client on the Enterprise Management Server.

You add multiple Management Server computers to configure a Bosch VMS Enterprise System. A user of Operator Client can log on with user name of a member an Enterprise User Group to get simultaneous access to these Management Server computers.

The following illustration shows the part of the scenario where you perform this task:



Operating permissions are configured on the Enterprise Management Server in **Groups**, Enterprise User Group tab.



User

Device permissions are configured on each Management Server in Enterprise Access tab.



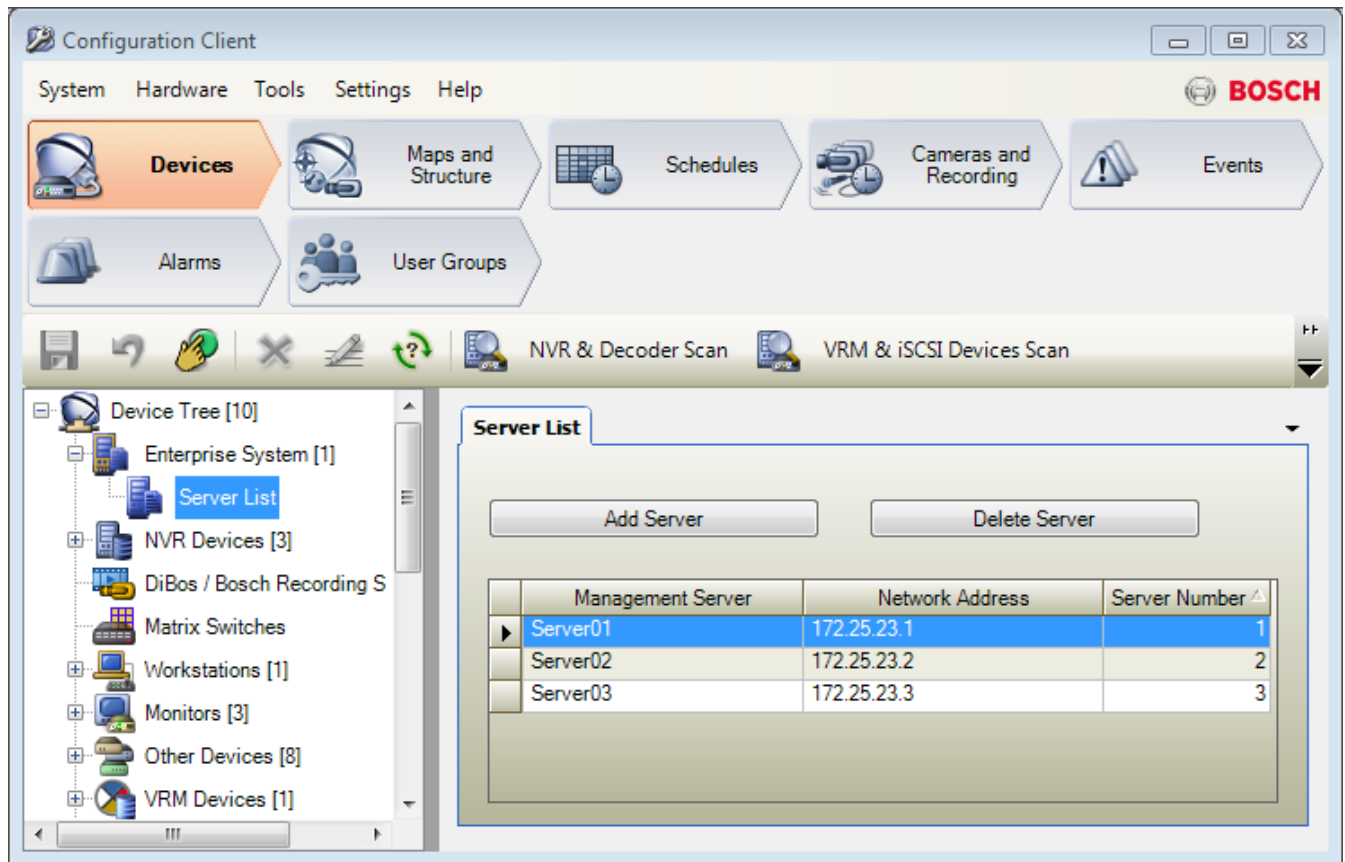
User Groups,

To add:

1. Click **Add Server**.
The **Add Server** dialog box is displayed.
 2. Type in a display name for the server and the network address (DNS name or IP address).
 3. Click **OK**.
 4. Repeat these steps until you have added all desired Management Server computers.
- ✓ The Management Server computers for your Enterprise System are configured.

Now configure the desired Enterprise User Groups and the Enterprise Access.

The following screenshot shows an example:

**See also**

- *Server List* page, 96
- *Enterprise System*, 188
- *User Groups* page, 172

14.1.2 Creating an Enterprise User Group

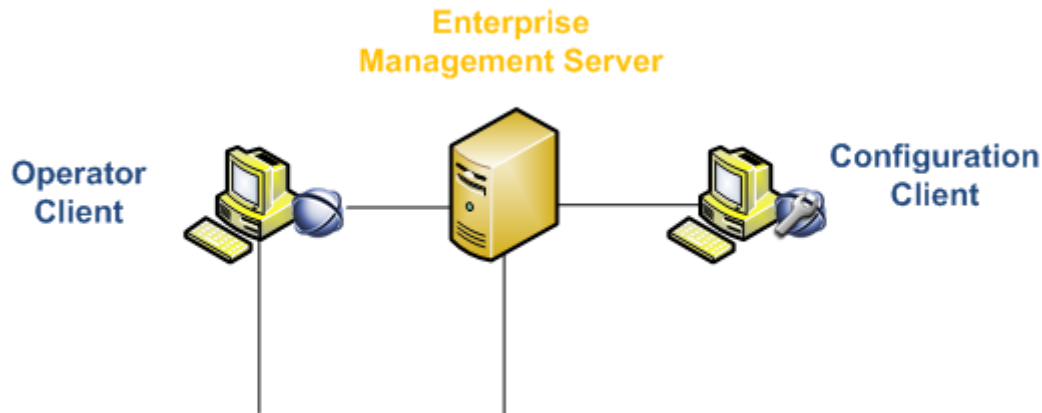


Main window > **User Groups**


You perform the task of creating an Enterprise User Group for an Enterprise Management system on the Enterprise Management Server.

You create an Enterprise User Group with users to configure their operating permissions. These operating permissions are available on an Operator Client that is connected to the Enterprise Management Server. An example of an operating permission is the user interface of the alarm monitor.

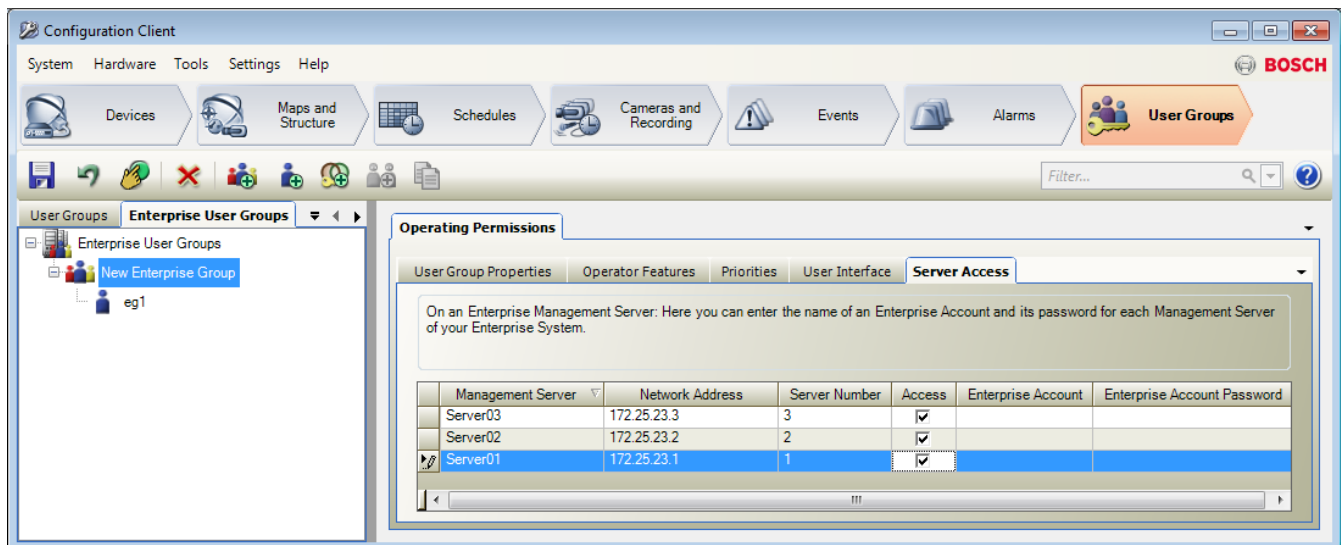
The following illustration shows the part of the scenario where you perform this task:



To create an Enterprise User Group:

1. Click the Enterprise User Groups tab.
2. Click . The **New Enterprise User Group** dialog box is displayed.
3. Type in the name and a description.
4. Click **OK**. The Enterprise User Group is added to the corresponding tree.
5. Configure the operating permissions and server access for the configured Management Server computers as required.

The following screenshot shows an example:



14.1.3 Creating an Enterprise Account

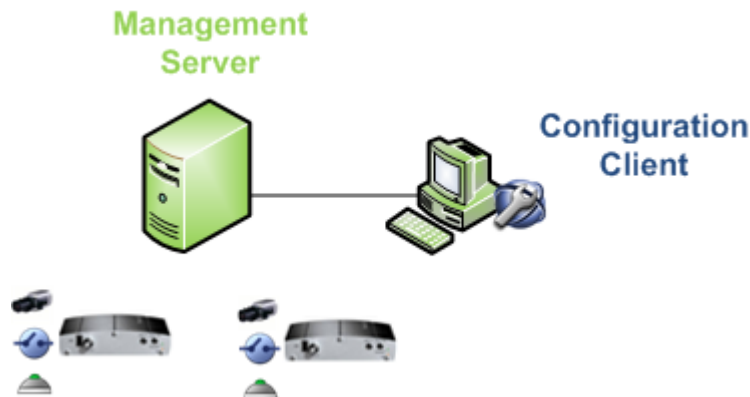


Main window > **User Groups**

You perform the task of creating an Enterprise Account on a Management Server. Repeat this task on each Management Server that is a member of your Enterprise System.

You create an Enterprise Account to configure the device permissions for an Operator Client using an Enterprise System.

The following illustration shows the part of the scenario where you perform this task:



To create an Enterprise Account:

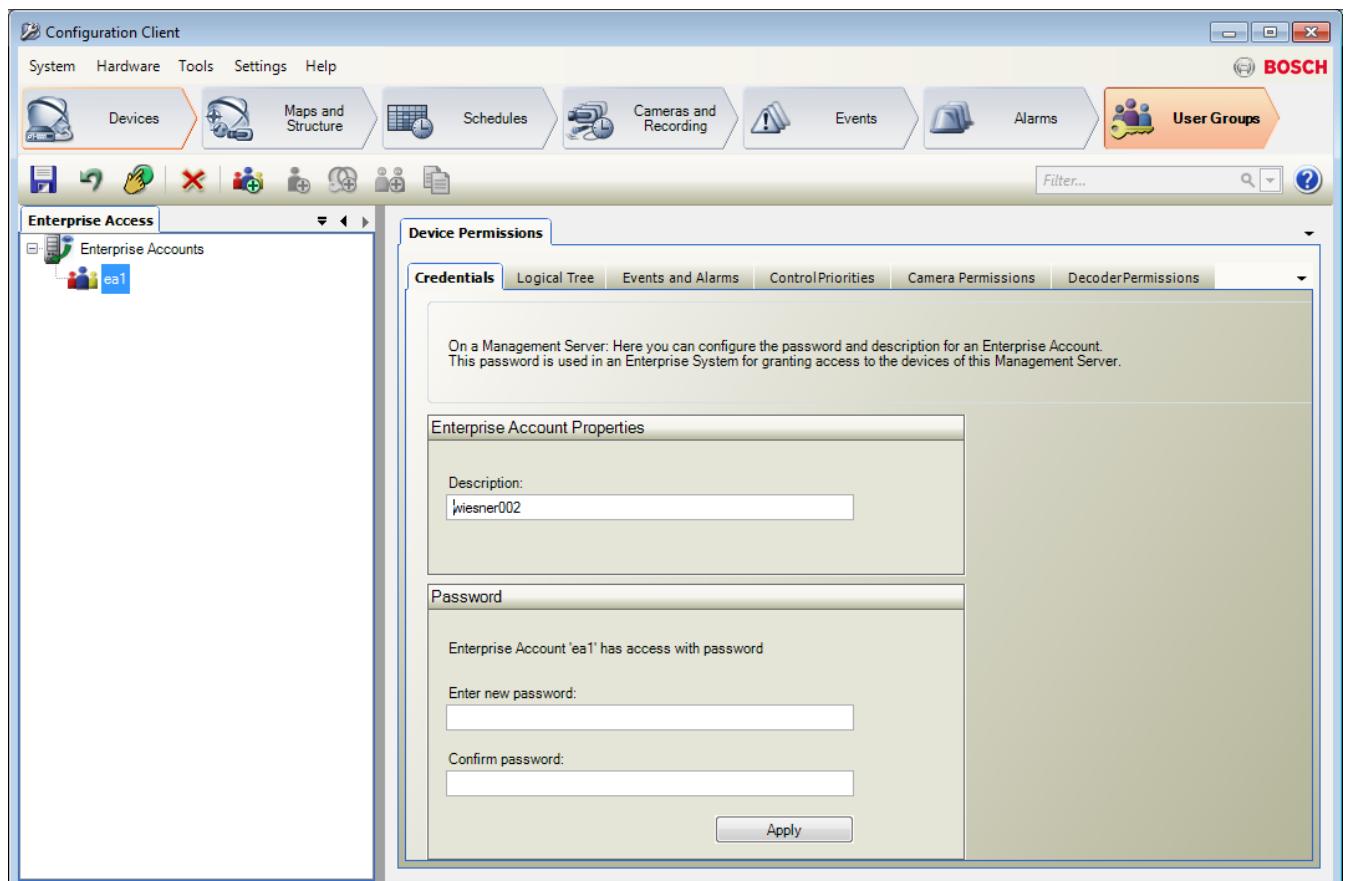
1. Click the Enterprise Access tab.
- 2.



Click .
The **New Enterprise Account** dialog box is displayed.

3. Type in the name and a description.
4. Click **OK**.
The Enterprise Account is added to the corresponding tree.
5. Configure the credentials and the device permissions as required.

The following screenshot shows an example:



14.2 Adding a Bosch ATM/POS bridge




This example describes how to set up a Bosch ATM/POS bridge.

Configuring the ATM/POS bridge





1. Ensure that the device is powered.
2. To configure the IP address and subnet mask of the device connect it to a COM port of your computer with a RS232 cable (use the specified Bosch cable for connection). See the Installation Manual of the Bosch ATM/POS bridge for details.
3. On this computer, start a Hyper terminal session (usually: **Start > Programs > Accessories > Communications > Hyper Terminal**).
4. Type a name for the session and click **OK**.
5. Select the COM port number and click **OK**.
6. Enter the following COM port settings:
 - 9600 bits/s
 - 8 data bits
 - no parity
 - 1 stop bit
 - hardware flow control
 Click **OK**.
7. Press F1 for displaying the system options menu of the device.
8. Enter 1 to set the IP address and the subnet mask as required.
9. Leave the default settings for the ports:
 - port1: **4201**
 - port2: **4200**

Adding the ATM/POS bridge to Bosch Video Management System

1. Connect the device to your Bosch Video Management System network.
2. Start Configuration Client.
- 3.

Click  **Devices**, expand the Logical Tree, expand , right-click , click **Add Bosch ATM/POS-Bridge**.

The **Add Bosch ATM/POS-Bridge** dialog box is displayed.

4. Type a name as desired and type the settings that you configured earlier.
5. Click the **Inputs** tab and select the required inputs.
6. Click  to save the settings.
7. Click  **Events**.
8. Expand , expand **POS Bridge Input**, click **Data Input**.
9. In the **Trigger Alarm** list, select **Always** to ensure that this event always triggers an alarm. If you want the event trigger an alarm only during a certain time span, select a schedule.
10. Click  to save the settings.
- 11.

Click  **Alarms**.

12. Configure the desired alarm settings for this event.

13.



Click  to save the settings and click  to activate the configuration.

14. Perform a test to ensure that the alarm is working as desired.

14.3

Adding a Bosch Allegiant input alarm

After a Bosch Allegiant device is added to Bosch Video Management System, you add Allegiant alarm inputs.

1. On the Device Tree, click the Allegiant device entry.
2. Click the **Inputs** tab and click **Add Input**.
3. Add the desired input alarms.
4. Click **Events**.
5. In the Event Tree, expand **Allegiant Devices**, expand **Allegiant Input**, and click **Input Closed** or **Input Opened** (depends on your application).
6. In the **Trigger Alarm** list, select **Always** to ensure that an event always triggers an alarm. If you want the event trigger an alarm only during a certain time span, select a schedule.

7.



Click  to save the settings and click  to activate the configuration.

8. Perform a test to ensure that the alarm is working as desired.

14.4

Adding and configuring 2 Dinion IP cameras with VRM recording

This section describes how to add 2 Dinion IP cameras for VRM recording, how to configure different recording settings and how to configure Forensic Search for these cameras.

Prerequisite:

VRM and iSCSI devices are properly configured.

This means:

- The VRM is added to the Device Tree.
- An iSCSI device with configured target and LUN is assigned to this VRM.


To add the IP cameras to an existing VRM:



Main window > **Devices** > Expand 

1.



Right-click  and click **Add Encoder**.

The **Add Encoder** dialog box is displayed.

2. Type the IP address of the IP camera and select the encoder type (Dinion IP).

Click **OK**.

Repeat this step for the other IP camera.

To add the IP cameras to the Logical Tree:



Main window > **Maps and Structure**



- ▶ Drag the cameras to the Logical Tree.

To change camera properties:

Main window > **Cameras and Recording** >  >  tab


1. In the **Live Video** column, configure the quality of live display. For these devices, you can only set the live quality per camera, not schedule dependent.
2. Make the appropriate settings in the other columns.

To configure recording settings for the cameras:

1. Click a schedule tab, for example .
2. In the  column, click a cell and select the appropriate stream quality.
3. Under **Continuous or Prealarm Recording**, in the **Select** column, select the desired recording mode.
If you click **Prealarm**: Click a cell in the **Duration** column to select the alarm recording time before the alarm in seconds.
4. Under **Alarm Recording**, in the **Duration** column, click a cell and type the desired recording time.
5. Repeat the previous steps to configure the recording settings for the other camera.

To enable Forensic Search on a workstation:

Main window > **Devices** > Expand 



1. Click the  icon of your workstation.
2. Click the **Settings** tab.
3. Click to select the **Enable Forensic Search** check box.

Performing a Forensic Search

Operator Client VRM main window >  > **Timeline** tab

Perform the Forensic Search on the workstation where you have enabled Forensic Search.

To perform a Forensic Search:

1. Using the Hairline, select the time period on the Timeline and select the corresponding Image pane.
2. Click .
- The **Forensic Search** dialog box is displayed.
The selected time period is copied to the **Start:** and **End:** fields.
If required, change the values. Click .
3. In the **Algorithm:** list, select an IVA entry.
4. In the **Surveillance Tasks** field, configure your Forensic Search.
You can find information on this in the relevant documents on the product CD supplied.
5. Click **Search** to start the Forensic Search.



The  window with the matching entries is displayed.

15

Global Configuration Client windows

This chapter contains information on some basic application windows available in Bosch Video Management System Configuration Client.

15.1

Configuration window

Main window

Allows you to configure your system. The buttons in the toolbar represent the various pages which you must configure to get a running system. Their sequence represents the recommended workflow of configuration.

- ▶ Click a tree item to display the available property pages.



Devices

Click to display the **Devices** page with all devices connected to the system.



Maps and Structure

Click to display the **Maps and Structure** page with Logical Tree, Device Tree, and maps.



Schedules

Click to display the **Recording Schedules** and **Task Schedules** page.



Cameras and Recording

Click to display the **Cameras and Recording** page with the Camera Table and the recording settings of all cameras.



Events

Click to display the **Events** page.



Alarms

Click to display the **Alarms** page.



User Groups

Click to display the **User Groups** page with all users.



Click to save the changed settings of the current window.



Click to restore the saved settings of the current window.



Click to display the **Activate Configuration** dialog box.



Click to delete the selected item. (Not available on every page).



Click to rename the selected item. (Not available on every page).



Click to display help information on the current window.



Click to refresh the state information for all devices (not available on every page). You can refresh the state of a single device: Right-click the device and click **Refresh state**.

Note: When you have a large system with several 1000 devices configured, the process of refreshing states can take a long time.

15.2

Menu commands

System menu commands		
	Save Changes	Saves all changes made on this page.
	Undo All Changes on Page	Restores the settings of this page since the last saving.
	Activation Manager...	Displays the Activation Manager dialog box.
	Export Device Information for OPC...	Displays a dialog box for creating a configuration file that you can import in a 3rd party management system.
	Exit	Exits the program.
Hardware menu commands		
	Initial Device Scan...	Displays the Initial Device Scan dialog box.
	NVR & Decoder Scan...	Displays the NVR & Decoder Scan dialog box.
	IP Device Configuration...	Displays a dialog box for configuring IP devices.
	Failover NVR Manager...	Displays a dialog box for re-assigning cameras to a fixed NVR.
Tools menu commands		
	Command Script Editor...	Displays the Command Script Editor dialog box
	Resource Manager...	Displays the Resource Manager dialog box.
	Sequence Builder...	Displays the Sequence Builder dialog box.
	Resource Converter	Displays the Resource Converter dialog box if old map resources in DWF format are available.

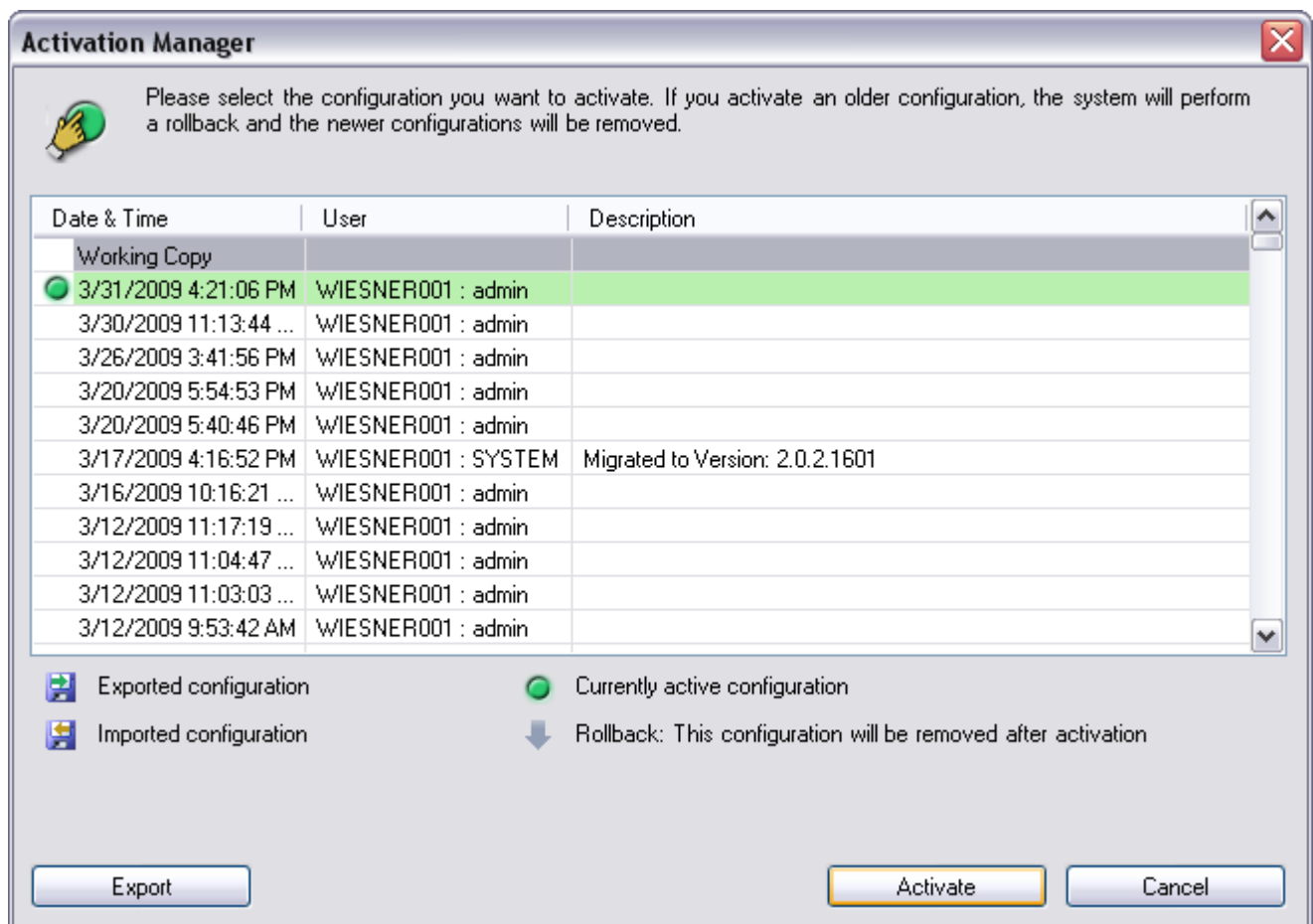
	License Manager...	Displays the License Manager dialog box.
Settings menu commands		
	Alarm Settings	Displays the Alarm Settings dialog box.
	Set Recording Qualities...	Displays the Stream Quality Settings dialog box.
	Options...	Displays the Options dialog box.
Help menu commands		
	Help	Displays the Bosch Video Management System Application Help.
	About...	Displays a dialog box containing information on the installed system, e.g., the version number.

15.3 Activation Manager dialog box

Main window > **System** menu > **Activation Manager...** command

Allows you to activate the current configuration or to rollback to a previous configuration.

Additionally you can export configuration files.



Export

Click to display a dialog box for entering a name of the configuration file for export.

Activate

Click to display the **Activate Configuration** dialog box.

15.4 Activate Configuration dialog box



Main window >

Allows you to type a description for the working copy of the configuration to be activated.

Set Delayed Activation time

Click to select a delayed activation time.

Force activation for all Operator Clients

If checked, each Operator Client workstation is automatically restarted to activate the new configuration. The user cannot refuse the new configuration.

If not checked, on each Operator Client workstation a dialog box appears for some seconds. The user can refuse or accept the new configuration. The dialog box is closed after a few seconds without user interaction. In this case the new configuration is not accepted.

15.5 License Manager dialog box

Main window > **Tools** menu > **License Manager...** command

Allows you to license the Bosch Video Management System package that you have ordered and to upgrade with additional features.

Base Packages

Displays the available base packages.

Type Number

Displays the Commercial Type Number (CTN) of the selected package, feature or expansion.

Status

Displays the licensing status if applicable.

Optional Features

Displays the available features.

Expansion

Displays the available expansions and their count. To change the count point right from a check box and click the up or down arrow.

Activate

Click to display the **License Activation** dialog box.

Import Bundle Info

Click to import an XML file containing a Bundle Information that you received from Bosch.

Add New Package

Click to display a dialog box for selecting a new license file.

15.6 License Activation dialog box

Main window > **Tools** menu > **License Manager...** command > **License Manager** dialog box > **Activate** button

Allows you to license the Bosch Video Management System packages that you have ordered and to upgrade with additional packages.

For obtaining the License Activation Key you must contact the Bosch Activation Center and specify the desired package and the computer signature of the Management Server.

Additionally you need the Authorization Number. This number is included in your software box.



License Activation Key:

Allows you to type the License Activation Key received from the Bosch Activation Center.

15.7 Alarm Settings dialog box

Main window >  **Alarms** > 
See *Alarm Settings dialog box*, 168 for details.

15.8 Stream Quality Settings dialog box

Main window >  **Cameras and Recording** > 
Allows you to configure stream quality profiles that you can later assign to the recording modes.
A stream quality combines video resolution, frame rate, maximum bandwidth, and video compression.



Click to add a new stream quality.



Click to delete a selected stream quality. You cannot delete the default recording settings.

Name:

Displays the name of the stream quality. When you add a new stream quality, you can change the name.

SD video resolution:

Select the desired video resolution. For an HD quality you configure the SD quality of stream 2.

Image encoding interval:

Move the slider or type the appropriate value.

The system calculates the corresponding values for IPS (PAL and NTSC).

With the image encoding interval you configure the interval at which images are encoded and transmitted. If 1 is entered, all images are encoded. Entering 4 means that only every fourth image is encoded, the following three images are skipped - this can be particularly advantageous with low bandwidths. The lower the bandwidth the higher this value should be to achieve best-quality video.

Target bit rate [Kbps]:

Move the slider or type the appropriate value.

You can limit the data rate for the encoder to optimize usage of bandwidth in your network. The target data rate should be set according to the desired picture quality for typical scenes with no excessive motion.

For complex images or frequent changes of image content due to frequent movements, this limit can be temporarily exceeded up to the value you enter in the **Maximum bit rate [Kbps]:** field.

Maximum bit rate [Kbps]:

Move the slider or type the appropriate value.

With the maximum bit rate you configure the maximum transmission speed which cannot be exceeded.

You set a bit rate limit to be able to reliably determine the appropriate disk space for storage of the video data.

Depending on the video quality settings for the I- and P-Frames, this fact can result in individual images being skipped.

The value entered here must be at least 10% higher than the value entered in the **Target bit rate [Kbps]:** field. If the value entered here is too low, it will automatically be adjusted.

I-Frame Distance

This parameter allows you to set the intervals in which the I-Frames are coded. Click **Automatic**, to insert I-Frames as necessary. An entry of 1 indicates that I-Frames are continuously generated. An entry of 2 indicates that only every second image is an I-Frame, and 3 only every third image etc. The I-Frames in between are coded as P-Frames.

Frame Quality Level

Here you can set a value between 0 and 100 for both the I-Frames and the P-Frames. The lowest value results in the highest quality and the lowest frame refresh rate. The highest value results in the highest frame refresh rate and the lowest image quality.

The lower the available transmission bandwidth, the higher adjust the quality level to maintain high quality of the video.

Note:

You adjust the video quality dependent on the motion and level of detail in the video. If you check the **Automatic** check boxes, the optimum relationship between motion and image definition is automatically adjusted.

VIP X1600 XFM4 Settings

Allows you to configure the following H.264 settings for the VIP X 1600 XFM4 encoder module.

H.264 deblocking filter: Select to improve visual quality and prediction performance by smoothing the sharp edges.

CABAC: Select to activate high efficient compression. Uses a large amount of processing power.

15.9

Options dialog box

Main window > **Settings** menu > **Options...** command

Language

Allows you to configure the language of your Configuration Client. If you select **Default system language** the language of your Windows installation is used.

Scan Options

Allows you to configure the scan process. **Subnet** allows that scanning is only active in the current subnet. **Cross subnet** allows for scanning beyond a router in other subnets. If the scan process does not find devices with one of these options, try the other one.

Analog Monitor Group (AMG) Settings

Allows you to configure that the users can control all analog monitor groups with each Bosch Video Management System client computer. It is then not required to configure this computer as a workstation in the Device Tree.

Logbook Configuration

Allows you to configure the connection string for the Logbook database (**Database Connection String (restart Management Server after changing this string):**). Change this string only when you want to configure a remote SQL server for the Logbook and only when you are familiar with SQL server technology.

16 Devices page




Main window > **Devices**

Displays the Device Tree and the configuration pages.

The count of items below an entry is displayed in square brackets.

Allows you to configure the available devices, such as mobile video services, ONVIF encoders, Bosch Video Streaming Gateway devices, encoders, decoders, VRMs, local storage encoders, analog matrices, or peripheral devices like ATM / POS bridges.



To add NVRs, decoders, and encoders to the system, click . The network is scanned for new devices. NVRs and decoders are automatically added to your system. Encoders must be manually assigned to NVRs, even if they are not recorded.

To add VRMs, iSCSI storage, encoders (live only, local storage, recorded), click **VRM & iSCSI Devices Scan**.

Unassigned encoders do not appear in the Device Tree. They are not part of your system until you assign them to a VRM or NVR.

Note:

Video data from encoders that are assigned to an NVR, is always encoded with MPEG-4.

Devices are represented in a tree and grouped by the physical network structure and the device categories.

Video sources like encoders are grouped under VRMs. Digital video recorders such as DiBos are listed separately.



NVR & Decoder Scan

Click to display the **NVR & Decoder Scan** dialog box.

Scans the network for NVRs, decoders, and encoders. When the scan process is finished, a dialog box for assigning the detected encoders to NVRs is displayed.



VRM & iSCSI Devices Scan

Click to display the **Bosch VMS Scan Wizard** dialog box.

Scans the network for VRMs, iSCSI devices, live only encoders, local storage encoders, or VIDOS NVRs.



Failover NVR Manager

Click to display the **Failover NVR Manager** dialog box.




IP Device Configuration

Click to display the **IP Device Configuration** dialog box.



Type in a string and press the ENTER key to filter the displayed items. Only items containing the string and their corresponding parent items (only in trees) are displayed. The count of filtered items and the total count of items is provided. An

active filter is indicated by . Enclose strings with double quotes to find them exactly, for example "Camera 1" exactly filters the cameras with this name, not camera 201.

To cancel filtering, delete the string in the filter field.

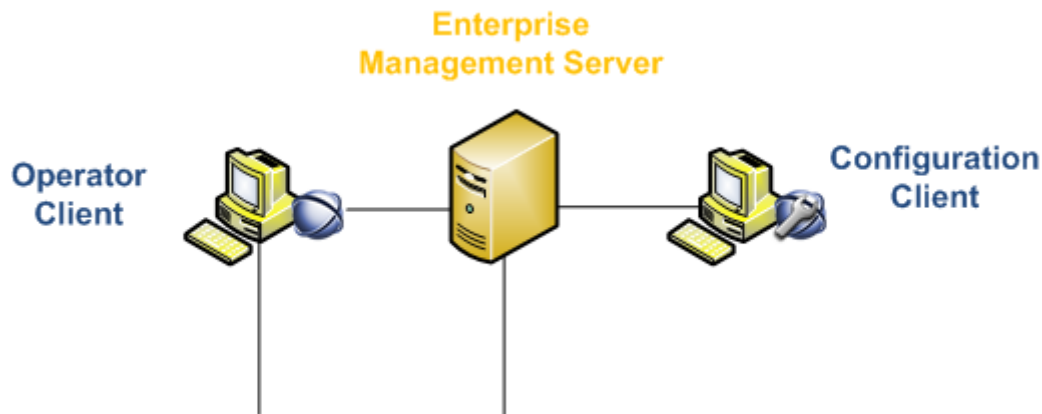
- Click a tree item to display the corresponding page.

16.1 Server List page

You perform this task of adding multiple Management Server computers in Configuration Client on the Enterprise Management Server.

You add multiple Management Server computers to configure a Bosch VMS Enterprise System. A user of Operator Client can log on with user name of a member an Enterprise User Group to get simultaneous access to these Management Server computers.

The following illustration shows the part of the scenario where you perform this task:



Operating permissions are configured on the Enterprise Management Server in **Groups**, Enterprise User Group tab.



User

Device permissions are configured on each Management Server in Enterprise Access tab.



User Groups,

Add Server

Click to display the **Add Server** dialog box.

Delete Server

Click to remove the selected Management Server entries.

Management Server

This column displays the display names of all added Management Server computers. You can change each entry.

Network Address

This column displays the IP addresses of all added Management Server computers. You can change each entry.

Server Number

This column displays the logical numbers of all added Management Server computers. You can change each entry.

16.1.1 Add Server dialog box



Main window > **Devices** > **Enterprise System** > **Server List**

Server Name:

Type in the display name of the Management Server.

Network Address:

Type in the IP address or DNS name of the Management Server.

16.2**Initial Device Scan dialog box**

Main window > **Hardware** menu > **Initial Device Scan...** command

Displays the devices which have duplicate IP addresses or a default IP address (192.168.0.1).

Allows you to change such IP addresses and subnet masks.

You must enter the correct subnet mask before changing an IP address.

16.3**NVR & Decoder Scan dialog box**

Main window > **Devices** > **NVR & Decoder Scan**

Displays detected encoders, NVRs, and decoders.

Allows you to assign detected encoders to an NVR. This is required to store the video data of the encoder on an NVR and to manage events of their assigned devices.

Unassigned devices do not appear in the Device Tree.

**Notice!**

Only devices in the local subnet are detected automatically. If a device is located in another subnet, add it manually to the Device Tree. To perform this, right-click the required node (for example an NVR), click **Add Encoder**, type the IP address of the device, click the **Network** tab and enter the subnet mask of the device.

Unassigned Encoders

Displays the unassigned encoders that were detected.

Assigned Encoders and NVRs

Displays assigned encoders and NVRs. NVRs are automatically assigned when they are detected. For assigning encoders you must drag them from the **Unassigned Encoders** list to an NVR.

Decoders

Displays the detected decoders.

Configure Devices

Click to display the **IP Device Configuration** dialog box.

Next >

Click to display the next page of this dialog box. If the device names differ from their names in Bosch Video Management System, a dialog box is displayed for changing the names as required.

Finish

Click to confirm the scan results and the assignments of encoders and close the dialog box.

16.4**Bosch VMS Scan Wizard**

Main window > **Devices** > **VRM & iSCSI Devices Scan**

Allows you to detect the following devices and assign them to Bosch Video Management System:

- VRMs, iSCSI storage devices (you can assign encoders during the scan process)
- Live only and local storage encoders
- VIDOS NVRs

Assign

Click to assign selected devices to their parent device. For example you assign encoders to a VRM.

Assign All

Click to assign all scanned devices to their parent device.

Remove

Click to remove a device from its parent device. The recordings of a removed device are not removed. You can find them when you add this device again.

Remove All

Click to remove all devices from their parent device. The recordings of a removed device are not removed. You can find them when you add this device again.

16.5 Failover NVR Manager dialog box



Main window > [NVR icon] > **Devices** > [Failover NVR icon with plus sign]
Displays status information on your Failover NVRs.

16.6 IP Device Configuration dialog box



Main window > [NVR icon] > **Devices** > [IP Device Configuration icon with checkmark]
Displays the following properties of the available IP devices:

- Device name and type
- Connection type (BVIP or ONVIF)
- IP address
- Subnet mask
- System password
- Firmware version
- Gateway IP address

Allows you to set the following properties of the available IP devices:

- Display name
- IP address
- Firmware version

You can configure display names, IP addresses and firmware versions for multiple devices at once.



Click to refresh the state information for all devices (not available on every page). You can refresh the state of a single device: Right-click the device and click **Refresh state**.

Note: When you have a large system with several 1000 devices configured, the process of refreshing states can take a long time.

Update Firmware

Click to update the firmware version of the selected device.

Show Passwords

Click to clear when you want the configured passwords being displayed in readable form.



Type in a string and press the ENTER key to filter the displayed items. Only items containing the string and their corresponding parent items (only in trees) are displayed. The count of filtered items and the total count of items is provided. An

active filter is indicated by . Enclose strings with double quotes to find them exactly, for example "Camera 1" exactly filters the cameras with this name, not camera 201.

To cancel filtering, delete the string in the filter field.

Apply

Click to configure the devices with the entered values without closing the dialog box.

16.7**Set IP Addresses dialog box**

Main window > **Devices** > > **IP Device Configuration** dialog box > Right-click two or more entries > Click **Set IP Addresses...**

Allows you to set the IP addresses for multiple IP devices.

Start with:

Type the first IP address.

End with:

Displays the last IP address for the selected devices after having clicked **Calculate**.

Calculate

Click to calculate the range of IP addresses for the selected devices.

16.8**Set Display Names dialog box**

Main window > **Devices** > > **IP Device Configuration** dialog box > Right-click two or more entries > Click **Set Display Names...**

Allows you to set the display names for multiple IP devices.

Start with:

Type the first name.

End with:

Displays the last name for the selected devices after having clicked **Calculate**.

Calculate

Click to calculate the range of display names for the selected devices.

16.9**NVRs / Failover NVRs / Redundant NVRs page**





Main window > **Devices** > Expand > Expand >

or



Main window > **Devices** > Expand > Expand >

or


Devices > Expand  > Expand  > 

Displays the property pages of a selected NVR, Failover NVR, or Redundant NVR.

- ▶ Click a tab to display the corresponding property page.

16.9.1

Global Settings page


Devices > Expand  > Expand  >  > **Global Settings** tab

or


Devices > Expand  > Expand  >  > **Global Settings** tab

Displays the following information:

- DNS name or IP address of the NVR.
This name is used for display in the Device Tree. You can only change this name in the Windows settings of the computer serving as NVR.
- Several network related settings like MAC address or Default Gateway.

Allows you to configure a Failover NVR for the currently selected NVR.

Switch over to:

Select a Primary NVR to change its role to a Failover NVR.

16.9.2

Disk Storage page


Devices > Expand  > Expand  >  > **Disk Storage** tab

or


Devices > Expand  > Expand  >  > **Disk Storage** tab

or


Devices > Expand  > Expand  >  > **Disk Storage** tab

Allows you to configure the disks and network directories for storing the video data.

Caution!

We recommend to store all video data on only one storage drive. Do not use multiple paths. Even if you must use more than 2 TB you can achieve such a large partition with appropriate formatting settings.

Add Network Path

Click to display a dialog box for selecting a network path.

Add Local Drive

Click to display a dialog box for selecting a local drive. This button is active only when a not configured local drive is available. You cannot select drive C:\ for storage.

Remove Storage

Click to display a dialog box for removing an added storage drive.

Use

Select a check box to select a drive for storage.

Drive

Displays the letter and the name of the drive.

Usage

Displays how much GB are used.

16.9.3**Camera Storage page**

Main window >  **Devices** > Expand  > Expand  > **Camera Storage** tab

Allows you to configure the backup settings for video data for assigned cameras.

Name

Displays the camera name as configured on the **Cameras and Recording** page.

Location

Displays the location of the camera as configured on the **Maps and Structure** page.

Min Time [days]

Click a cell to edit the minimum number of days that video data from this camera is to be retained. Recordings younger than this number of days are not deleted automatically.

Max Time [days]

Click a cell to edit the maximum number of days that video data from this camera is to be retained. All recordings including protected recordings older than this number of days are deleted automatically.

Caution!

Select the maximum number of days according to the available disk space or enlarge the disk space. Ensure that maximum 85% of the available disk space is used.

Caution!

Recordings with a time stamp lying between minimum and maximum time except for protected recordings are automatically deleted when disk space is low.

Keep Protected Recordings

Select the check box to ensure that protected recordings are not deleted when their time stamp exceeds the maximum storage time. If this option was configured for a camera that has been removed from the Device Tree afterwards, all recordings including protected recordings of this camera are deleted after exceeding the maximum storage time.

Export on

Select the computer where videos are exported for backup. You can select the Management Server computer or this NVR computer. Exporting on the NVR is faster because exporting on the Management Server creates an additional network load.

Caution!

If you select the Primary NVR computer, video data that has been recorded on a Failover NVR during a downtime of the Primary NVR is not backed up.

Backup of video data uses as much network bandwidth as possible. Ensure that enough network performance is available.

Path

Select the path for the backup.




Schedule

Select the schedule for the backup.

Time [h]

Enter the number of hours into the past beginning with the scheduled time that you want to back up.

16.9.4**Assigned NVRs page**

Main window >  **Devices** > Expand  > Expand  > **Assigned NVRs** tab
Displays the Primary NVRs in your system and their assignment to the selected Failover NVR.
Allows you to assign or un-assign the available NVRs as required.

Remove NVR

Click to move the selected Primary NVRs to the **Time [h]** column.

Export on

Displays all Primary NVRs that are assigned to the selected Failover NVR.




Add NVR

Click to move the selected Primary NVRs to the **Export on** column.

Time [h]

Displays all Primary NVRs that are not assigned to the selected Failover NVR.

16.9.5**Assigned NVR page**

Main window >  **Devices** > Expand  > Expand  > **Assigned NVR** tab
Displays the Primary NVRs in your system and their assignment to the selected Redundant NVR.

Allows you to assign or un-assign the available NVRs as required.




Click left to the Primary NVR name to configure this Primary NVR to be mirrored by the selected Redundant NVR.

Backup

Click to use the same camera storage settings as the Primary NVR. If you clear, the **Camera Storage** tab becomes active and you can configure specific camera storage settings for this Redundant NVR.

16.9.6 Add Network Path dialog box



Main window >  **Devices** > Expand  > Expand  > **Disk Storage** tab > **Add Network Path** button

Allows you to add a network path as storage location.

UNC path (e.g. \\VideoStorage2\NVR4)

Type a network path. Use the syntax required for UNC paths: \\<computer_name>\<directory>

...

Click to display a dialog box for selecting a network path.

Logon necessary

Select the check box if the network path is protected by a user ID.

User name




Type the required user name.

Password

Type the required password.

16.9.7 Add Local NVR Drive dialog box



Main window >  **Devices** > Expand  > Expand  > **Disk Storage** tab > **Add Local Drive** button

Allows you to add a local drive of the selected NVR as storage location. Select a check box to activate the corresponding drive.

Select All

Click to select all check boxes.

Clear All

Click to clear all check boxes.

16.10 Vidos NVRs page



Main window >  **Devices** > Expand  > Expand  > 

Allows you to add and configure VIDOS NVRs.

You cannot configure VIDOS systems from within Bosch Video Management System.

Network Address:

Type the DNS name or the IP address of your VIDOS NVR.

User Name:

Type the user name for logging on to the VIDOS NVR.

Password:

Type the password for logging on to the VIDOS NVR.

16.11 DiBos page




Main window >  **Devices** >  > 

Displays the property pages of a selected DiBos system.
Allows you to integrate a DiBos system into your system.
You cannot configure DiBos systems from within Bosch Video Management System.
▶ Click a tab to display the corresponding property page.

16.11.1 Add DiBos System dialog box



Main window >  **Devices** > Right-click > **Add DiBos/BRS Recorder** command
Allows you to add a DiBos system to your Bosch Video Management System.

Network address:

Type the DNS name or the IP address of your DiBos system.

User name:


Type the user name for logging on to the DiBos system.

Password:

Type the password for logging on to the DiBos system.

16.11.2 Settings page




Main window >  **Devices** > Expand > **Settings** tab

Displays the network settings of the DiBos system connected to your system. Allows you to change the settings if required.

16.11.3 Cameras page




Main window >  **Devices** > Expand > **Cameras** tab

Displays all cameras available on the DiBos system connected to your system.
Allows you to remove cameras.

16.11.4 Inputs page




Main window >  **Devices** > Expand > **Inputs** tab

Displays all inputs available on the DiBos system connected to your system.
Allows you to remove items.

16.11.5 Relays page



Main window >  **Devices** > Expand > **Relays** tab

Displays all relays available on the DiBos system connected to your system.
Allows you to remove items.

16.12 Matrix Switches page



Main window > **Devices** >

Displays the property pages of the Bosch Allegiant device.

You do not configure the Bosch Allegiant device itself but only the Bosch Video Management System related properties. For connecting an Allegiant device with Bosch VMS, see the **Concepts** chapter in this Online Help. This chapter provides background information on selected issues.

You can additionally configure control priorities for Allegiant trunk lines.

- ▶ Click a tab to display the corresponding property page.

16.12.1 Connection page



Main window > **Devices** > Expand > **Connection** tab

Displays the name of the Bosch Allegiant configuration file.

Bosch Video Management System can read out a configuration file in structured storage format with the names and configuration information of all cameras connected to the Bosch Allegiant device.

Update Configuration

Click to select an updated Bosch Allegiant configuration file.

16.12.2 Cameras page



Main window > **Devices** > Expand > **Cameras** tab

Displays a camera table of the cameras that are connected to the Bosch Allegiant device.

No.

Displays the consecutive number of the camera.

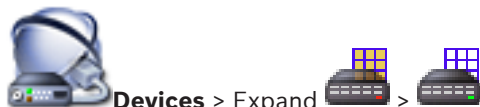
Logical Number

Displays the logical number of the camera.

Camera Name

Displays the name of the camera.

16.12.3 Outputs page



Main window > **Devices** > Expand > **Outputs** tab

Allows you to configure the usage of a Bosch Allegiant device output and to assign an encoder to an output.

To store the video data of a Bosch Allegiant device output in Bosch Video Management System, you must assign an encoder to the output. This encoder must be connected to the output.

No.

Displays the number of the output.

Allegiant Logical No.

Displays the logical number of the output within Allegiant.

Bosch VMS Logical No.

Allows you to change the logical number of the output within Bosch Video Management System. If you enter an already used number, a message is displayed.

Name

Displays the name of the output.

Usage

Allows you to change the usage of the output.

If you select **Digital Trunk**, you can assign an encoder to this output in the **Encoder** field. The Allegiant output becomes network-compatible.


If you select **Allegiant Monitor**, in the Operator Client the user can assign the camera signal to a hardware monitor. PTZ control is possible if the camera is configured as PTZ camera. In the Operator Client, the user cannot drag this camera on an Image pane.

If you select **Unused**, the user cannot assign a monitor to an Allegiant camera.

Encoder

Allows you to assign an output to an encoder. You can only select an encoder when you have checked **Digital Trunk**. The encoder is locked for the Logical Tree. If you assign an encoder that is already in the Logical Tree, it is removed from there. In the Operator Client, the user can drag the camera to an Image pane.

16.12.4**Inputs page**

Main window > **Devices** > Expand  > **Inputs** tab

Allows you to add inputs to a Bosch Allegiant device.

Add Input

Click to add a new row in the table for specifying a new input.

Delete Input

Click to remove a row from the table.

Input No.

Type the required number of the input. If you enter an already used number, a message is displayed.

Input Name

Type the required name of the input.


16.13**Workstation page**

Main window > **Devices** > Expand  > 

Allows you to configure the following settings for a workstation:

- Add a digital keyboard connected to a Bosch Video Management System workstation.
- Assign a Command Script that is executed on startup of the workstation.
- Select the data stream for live display.
- Enable Forensic Search.
- Assign analog monitor groups to a workstation.

A workstation must have the Operator Client software installed.

To add a CCTV keyboard that is connected to a decoder, expand , click .

To assign an analog monitor group, configure such a group in  >  > .

16.13.1

Settings page



Main window >  **Devices** > Expand  >  > **Settings** tab

Allows you to configure a script that is executed when the Operator Client on the workstation is started.

Allows you to configure which stream of an IP device is used for live display.

Allows you to enable Forensic Search for this workstation.

And you can configure the keyboard that is connected to this workstation.

Network address:

Type the DNS name or the IP address of your workstation.

Startup script:

Select the desired script that you want to be started when the workstation's Operator Client is started. You create or import such a script on the **Events** page.

Override recording settings

Select the check box to enable selecting the desired stream for live view. The other one is used for continuous, motion, and alarm recording for this workstation.

See dual streaming in the glossary.

Enable Forensic Search

Click to enable Forensic Search for this workstation.

Use direct playback from storage

Select the check box to send the video stream directly from the storage device to this workstation. Now the stream is not sent via VRM. The workstation still needs connection to the VRM to ensure correct playback.

Retrieve Live video from Streaming Gateway instead of camera

Displays the list of Video Streaming Gateway devices. Select the desired entries to enable the transmission of video data via low bandwidth segments between the video source and this workstation.

Keyboard type:

Select the type of the keyboard that is connected to your workstation.

Port:

Select the COM port that is used to connect your keyboard.

Baudrate:

Select the maximum rate, in bits per second (bps), that you want data to be transmitted through this port. Usually, this is set to the maximum rate supported by the computer or device you are communicating with.

Data bits:

Displays the number of data bits you want to use for each character that is transmitted and received.

Stop bits:

Displays the time between each character being transmitted (where time is measured in bits).

Parity:

Displays the type of error checking you want to use for the selected port.

Port type:

Displays the connection type that is used to connect the CCTV keyboard with the workstation.

16.13.2 Assigned Analog Monitor Groups page



Main window > **Devices** > Expand  > **Assigned Analog Monitor Groups** tab

Allows you to assign an analog monitor group to this workstation. Beforehand you must have



added an analog monitor group in  >  > .

Assigned Analog Monitor Groups

Select the check box to assign the analog monitor group to this workstation. In the **Options** dialog box, you can configure that all other workstations can also control analog monitor groups.

Analog Monitor Group

Displays the name of each analog monitor group.

16.14 Decoders page



Main window > **Devices** > Expand  > 

Allows you to configure decoders.


See *Encoders / Decoders page, 128* for details.

16.15 Analog Monitor Groups page



Main window > **Devices** > Expand  > 

Allows you to add and configure analog monitor groups. You assign an analog monitor group to a

Bosch Video Management System workstation in .

Caution!

You cannot control an analog monitor group from within Operator Client when the connection to the Management Server is lost or when Operator Client with Enterprise System is used.

16.15.1 Settings page



Main window > **Devices** > Expand  >  > **Settings** tab

Allows you to perform the following tasks:

- Configure an analog monitor group
- Assign decoders to an analog monitor group
- Enable quad view for decoders that support quad view

Name:

Type the name of the analog monitor group.

Columns:

Enter the number of columns for the analog monitor group. The result is displayed.

Rows:

Enter the number of rows for the analog monitor group. The result is displayed.

Unassigned Decoder Channels

Drag a decoder to an available analog monitor.

Monitor image

The white number, if present, displays the logical number of the initial camera. The black number displays the logical number of the decoder.

Right-click an analog monitor image to toggle between single view and quad view. On the **Advanced Configuration** page, the **Quad View** column displays the corresponding setting. To un-assign a decoder, right-click the analog monitor image and click **Clear Monitor**.

16.15.2**Advanced Configuration page**

Main window > **Devices** > Expand > **Advanced Configuration** tab

Allows you to perform the following tasks:

- Configure the logical number of a decoder or decoder channel.
- Enable quad view for decoders that support quad view
- Configure the OSD.

**Notice!**

We do not recommend configuring quad view for H.264 cameras.

Note the following hints on switching the decoder between quad view and single view in the Operator Client:

- The user can manually switch the decoder back to single view when it is configured as quad view.
- When the decoder is switched to single view or to quad view and a sequence is just running, only the last video stream remains visible.
- When the user switches to quad view, the last cameras that have been displayed on tile 2-4 are reconnected.
- This is also valid for trunk lines. There is only one limitation: If the matrix camera cannot be reconnected, this is ignored without an error message. A black tile is visible.
- When switching to single view, all trunklines that are displayed on tile 2-4 are disconnected. Only the camera number is stored for a later switch to quad view.

Decoder Name

Displays the display name of the decoder.

Network Address

Displays the IP address of the decoder.

Logical Number

Enter the logical number of the decoder. If you enter an already used number, a message is displayed.

Quad

Displays the position of the decoder on the quad view. 1 is left upper corner, 4 is right lower corner.

Quad View

Select the check box to enable quad view for this decoder. On the **Settings** page, the corresponding analog monitor image displays the quad view. Logical numbers are created automatically. If you want the Operator Client user to be able to switch between quad view and single view, then check **Quad View**. If you clear **Quad View**, the Operator Client user cannot switch.

AMG

Displays the analog monitor group that the decoder in this row is assigned to.

Initial Camera

Click to select the camera that is displayed initially on the monitor after having started the Operator Client. The logical number of the initial camera is displayed as the white number on the monitor image in the **Settings** page.

OSD Camera Name

Check to display the camera name as OSD.

OSD Camera No.

Check to display the logical number of the camera as OSD.

OSD Position

To set the location of an OSD, select the desired entry.

16.16**Monitor Wall page**

Main window > **Devices** >

Allows you to add a monitor wall application. This application allows for controlling the monitor wall hardware from within Operator Client. No server is involved in controlling the monitor wall. This ensures that the user of Operator Client is always able to control the monitor wall even if the Management Server is offline.

See also

- *Adding a monitor wall, 36*

16.16.1**Add Monitor Wall dialog box**

Main window > **Devices** > Right-click > Click **Add Monitor Wall**

Add the required decoder to your Bosch Video Management System before you add the monitor wall.

Decoder:

Select the decoder that is connected to the monitor wall.

Max. number of monitors:

Type in the number of used decoder channels if you do not want to use all available channels. If you leave the field empty, the maximum number of channels that is supported by the decoder, is displayed in Operator Client.




Enable thumbnails

Click to check if you want to display a snapshot in Operator Client for each monitor. This snapshot is regularly updated.

See also




- *Adding a monitor wall, 36*

16.17**Communication Devices page**

Main window >  **Devices** > Expand >  > 
Allows you to add or configure a communication device.
You can configure the following communication devices:

- E-mail
- SMS (GSM or SMSC dial-up provider)

16.17.1**E-mail/SMTP Server dialog box**




Main window >  **Devices** > Expand >  > Right-click  > **Add E-mail/SMTP Device** command

Allows you to add an e-mail server to your Bosch Video Management System.

Name:

Type the display name of the e-mail server.

16.17.2**Add SMS Device dialog box**

Main window >  **Devices** > Expand >  > Right-click  > **Add SMS Device** command

Allows you to add an SMS device to your system.

Name:

Type the name of the e-mail server that is used for being displayed.





GSM modem

Click to add a GSM modem.

SMSC dial up

Click to add a Hayes compatible modem which can connect to an SMSC provider.

16.17.3**SMTP Server page**

Main window >  **Devices** > Expand >  > Expand >  > 
Allows you to configure the e-mail settings of your system. On the **Events** page, you can assign an event to an e-mail. When this event occurs, the systems sends an e-mail. You cannot receive e-mails in Bosch Video Management System.

SMTP Server Name:

Type the name of the e-mail server. You get the information about the required entry from your provider. Usually this is the IP address or DNS name of your e-mail server.

Port:

Type the required network port number for outgoing mails. You get the information about the required entry from your provider.

Connection time-out [s]:

Type the number of seconds of inactivity until the connection is disconnected.

Authentication:

Select a check box for the required authentication method. You get the information about the required entry from your provider.

Username:

Type the user name for authenticating at the e-mail server. You get the information about the required entry from your provider.

Password:

Type the password for authenticating at the e-mail server. You get the information about the required entry from your provider.

Send Test E-mail

Click to display the **Send Test E-mail** dialog box.

16.17.4**Send Test E-mail dialog box**

Main window >

Devices >

Expand



> Expand



>



>

Send Test E-mail

button

Allows you to send a test e-mail.

From:

Type the e-mail address of the sender.

To:

Type the e-mail address of the recipient.

Subject:

Type the subject of the e-mail.

Message:

Type the message.

Send Test E-mail

Click to send the e-Mail.

16.17.5**GSM Settings / SMSC Settings page**

Main window >

Devices >

Expand



> Expand



>



Allows you to configure the SMS settings of your Bosch Video Management System. On the **Events** page, you can assign an event to a short message. When this event occurs, the system sends a short message. If the number of entered characters exceeds the highest permitted number (usually 160), an SMS is divided into multiple parts.

Device:

Select the required COM port where the external modem is connected to. If your computer has an internal modem, select the corresponding entry.

Speed:

Select the required transfer rate.

Pin: (for GSM device only)

Type the personal identification number for authenticating at the device.

Data format: (for SMSC device only)

Select the required data format. You get the information about the required entry from your provider.

Unicode (for GSM device only)

Select the check box to enable unicode characters. This reduces the highest number of permitted characters to 80.

Dial string: (for SMSC device only)

Type the number to connect to the SMSC dial-up provider. You get this number from your provider.

Password: (for SMSC device only)

Type the password that the device needs to connect to the SMSC dial-up provider if required. You get the information about the required entry from your provider.

Protocol: (for SMSC device only)

Select the required protocol that the device uses to connect to the SMSC dial-up provider. You get the information about the required entry from your provider.

Recipient:

Type the mobile phone number of the recipient of the short messages. Include the country prefix without + sign (e.g. 0049170123456).

Message (max. 160 chars):

Type the text for the short message.

SMS Test Message

Click to send a test short message.

16.18

POS + ATM page



Main window >  **Devices** > Expand

Allows you to add and configure peripheral devices, for example, a Bosch ATM/POS Bridge. If you want to add multiple bridges at one server, you must use different ports.

16.18.1

Add Bosch ATM/POS-Bridge dialog box



Main window >  **Devices** > Expand

Bridge command

Allows you to add a Bosch ATM/POS Bridge.

Name:

Type an appropriate name for the device.

IP address:

Type the IP address of the device.

Port 1:

Type the appropriate port number used for transmitting the keep alive signal (every 5 seconds).

Port 2:

Type the appropriate port number used for transmitting messages from the device.

16.18.2**Bosch ATM/POS-Bridge page**

Main window > **Devices** > Expand  > Expand  > **Bosch ATM/POS-Bridge** tab

Allows you to configure a Bosch ATM/POS Bridge.

IP address:

Type the IP address of the device.



Port 1:

Type the appropriate port number used for transmitting the keep alive signal (every 5 seconds).

Port 2:



Type the appropriate port number used for transmitting messages from the device.

16.18.3**Inputs page**

Main window > **Devices** > Expand  > Expand  > **Inputs** tab

Allows you to configure an ATM device.

16.18.4**ATM Settings page**

Main window > **Devices** > Expand  > Expand  > **ATM Settings** tab

Allows you to configure an ATM device.

Serial Port:

In the list, select the appropriate port.

Inputs

Select a check box to enable the corresponding input.

16.19**Virtual Inputs page**

Main window > **Devices** > Expand  > 

Displays the virtual inputs configured in your system.

Allows you to add new virtual inputs and to delete existing ones.

Add Inputs

Click to display a dialog box for adding new virtual inputs.

Delete Inputs

Click to delete a selected virtual input.


Number

Displays the number of the virtual input.

Name

Click a cell to modify the name of the virtual input.

16.19.1**Add Virtual Inputs dialog box**

Main window > **Devices** > Expand  > **Add Inputs** button
Allows you to add new virtual inputs.

Start:

Select the first number of the new virtual inputs.

End:

Select the last number of the new virtual inputs.



Name:

Type the name of the new virtual inputs. A consecutive number is appended.

Add

Click to add the new virtual inputs.

16.20**SNMP page**

Main window > **Devices** > Expand  > 
Allows you to add or configure an SNMP measurement for maintaining the network quality.



16.20.1**Add SNMP dialog box**

Main window > **Devices** > Expand  > Right-click  > **Add SNMP** command
Allows you to add a network monitoring system to your Bosch Video Management System.

Name:

Type a name for the network monitoring device.

16.20.2**SNMP Trap Receiver page**

Main window > **Devices** > Expand  > Expand 
Allows you to select devices for monitoring and to select SNMPtrapOIDs that trigger an event for the selected device when they are received.

**Notice!**

You must enter the IP address of the Bosch Video Management System Management Server as the trap receiver in your devices that you want to monitor.

SNMP Trap Sending Devices:

Allows you to enter a range of IP addresses of the monitored network devices. To monitor a single device enter the corresponding IP address in the **Range From** cell.

Be careful when changing these addresses. Entering a wrong address stops network monitoring of this device.

SNMP Trap Filter Rules:

Allows you to enter OIDs and corresponding values. You can use wildcards as * and ? to enhance the filter range. If you enter OIDs and values in more than one row, these filter rules must match simultaneously to trigger an event. In both columns, you can enter a regular expression in {}. If there are characters outside the brackets, the regular expression is not evaluated.

Show Trap Logger Tool

Click to display the **SNMP Trap Logger** dialog box for tracing SNMP trap OIDs.

16.20.3

SNMP Trap Logger dialog box



Main window > **Devices** > Expand > Expand > Select a generic SNMP Trap Receiver > Click **Show Trap Logger Tool**

Allows you to trace SNMPtrapOIDs. You can receive traps from all devices in your network or only from selected ones. You can filter the traps to be received and you can add OIDs and values of selected traps to the **SNMP Trap Filter Rules:** table.

Start/Pause

Click to start or stop a tracing process.

Only Traps From Sender

Enter the IP address or DNS name of a device. Only traps from this device are traced.

Only Traps Containing

Enter a string a trap can contain. You can use * and ? as wildcards. Strings in {} are treated as regular expressions. Only traps containing such a string are traced.

Received Traps

Displays the traps that are received by a tracing process.



Click to remove all entries in the **Received Traps** field.

Trap Details

Displays the trap details. You can copy the OID and the Value entry to the **SNMP Trap Filter Rules:** table.

16.21

CCTV Keyboards page



Main window > **Devices** > Expand > Expand > Allows you to add a CCTV keyboard connected to a Bosch Video Management System workstation or to a decoder.

Add Keyboard

Click to add a row to the table for configuring a keyboard.

Delete Keyboard



Click to remove the selected row.

Keyboard Type

Displays the type of the keyboard that is connected to your workstation.

Connection

In a cell, select the required connection of the keyboard to a workstation or a decoder. If you

select a workstation, the keyboard is also added to the  >  page.

Port

In a cell, select the desired COM port.

Baudrate

In a cell, select the maximum rate, in bits per second (bps), that you want data to be transmitted through this port. Usually, this is set to the maximum rate supported by the computer or device you are communicating with.

Data bits

Displays the number of data bits you want to use for each character that is transmitted and received.

Stop bits

Displays the time between each character being transmitted (where time is measured in bits).



Parity

Displays the type of error checking you want to use for the selected port.

Port type





Displays the connection type that is used to connect the CCTV keyboard with the workstation.

16.22**I/O Modules page**

Main window >  **Devices** > Expand  > 

Allows you to add or configure an I/O module.
Currently only ADAM devices are supported.

16.22.1**ADAM page**

Main window >  **Devices** > Expand  >  >  > **ADAM** tab

Displays information on the selected ADAM device.
Allows you to change the display name of an ADAM device.

ADAM type:

Select the appropriate device type.





Inputs total:

Displays the total number of inputs available with this device type.

Relays/Outputs total:

Displays the total number of relays available with this device type.

16.22.2**Inputs page**

Main window >  **Devices** > Expand  >  >  > **Inputs** tab

Allows you to change the display names of the inputs of the selected ADAM device.

Number

Displays the logical number of the input.

Name

Click a cell to change the display name of an input.

16.22.3**Relays page**

Main window > **Devices** > Expand > > **Relays** tab
Allows you to change the display names of the relays of the selected ADAM device.

Number

Click a cell to change the logical number of a relay.

Name

Type the display name of the relay.

16.23**Allegiant CCL Emulation page**

Main window > **Devices** > Expand > > >
Allows you to activate the Bosch AllegiantCCL emulation. This emulation starts an internal Bosch VMS service that translates CCL commands of the Matrix Switch into Bosch VMS. You configure a COM port of the Management Server to listen to these CCL commands. The CCL emulation helps to exchange existing Allegiant devices with Bosch Video Management System or to use Bosch Video Management System with applications that support the Allegiant CCL commands.

Allegiant CCL commands supported in Bosch VMS, 196 lists the CCL commands supported in Bosch Video Management System.

Note:

Do not configure the Allegiant CCL emulation and an Allegiant device to the same COM port. If for both devices the same COM port is configured, the Allegiant device wins. The access of the Allegiant CCL emulation device fails with an appropriate message.

To solve this, the Management Server must have two different COM ports or connect the Allegiant device to another computer.

Enable Allegiant CCL Emulation

Select the check box to enable the emulation.

Baud rate

Select the value for the transmission rate in bit/s.

Stop bits

Select the number of stop bits per character.

Parity check

Select the type of parity check.

Interface mode

Select the desired protocol for the serial interface.

Half-duplex mode

Select the setting appropriate for your application.

16.24 Mobile Video Service page



Main window > **Devices** >

Allows you to add a transcoding service to your Bosch Video Management System. This transcoding service adapts the video stream from a camera configured in Bosch Video Management System to the available network bandwidth. This enables mobile video clients like an iPhone to receive live or playback video data via unreliable network connections with limited bandwidth.

See also

- *Adding a mobile video service, 38*

16.24.1 Add Mobile Video Service dialog box



Main window > **Devices** > Right-click > Click **Add Mobile Video Service**

URI

Type in the URI. Follow the syntax rules of the example:

`http://www.MyDomain.org/Mybvms/mvs`

See also

- *Adding a mobile video service, 38*

16.25 VRM Devices page



Main window > **Devices** > Expand >

Allows you to add and configure VRM devices. A VRM device needs at least an encoder, an iSCSI device, and a LUN assigned to the iSCSI device. See the Release Notes and the data sheet for current firmware versions. The recording mode of the assigned encoders is set to VRM when the configuration is activated.

Caution!

After you have added an iSCSI device with respective encoders to your Bosch Video Management System, you must add the IQN of each encoder to this iSCSI device (valid for some iSCSI device types).

See *Configuring an iSCSI device, 38* for details.

Caution!

Ensure that the time of the VRM computer is synchronized with the Management Server. Otherwise you can lose recordings.

Configure the time server software on the Management Server. On the VRM computer, configure the IP address of the Management Server as time server using standard Windows procedures.

16.26 VRM Settings page



Main window > **Devices** > Expand

VRM Server name

Type a name that is displayed in the device tree of Bosch Video Client.

Server initiator name

Displays the iSCSI initiator name of VRM Server.

System-wide CHAP password

Enter the password that you have configured in the iSCSI storage device. The CHAP password is valid for the VRM and is sent to all devices automatically. Replay clients do not need additional configuration.

Use as failover server / Master server IP address / Password

You can set up a computer as the master server, provided that VRM Server is started on it, and set up another computer as a failover server. The configuration settings of the master server are then synchronized on the failover server. If the master server fails, the failover server automatically takes over the management of the VRM system.

Secondary target block allocation [GB]

Enter the number of 1 GB storage blocks that are allocated to a device on the failover iSCSI target (secondary target). The minimum number of blocks for each device allocated to the secondary target is eight. When carrying out this step, note that each VIP X1600 module is counted as an individual device.

The retention time configured in the system also applies to secondary target blocks.

The number of secondary target blocks for a device should be selected in such a way that there is enough disk space to continue recording for the required length of time if the primary target fails. Depending on the bit rate, you can assume that one block is sufficient for approximately one hour of recording.

Blocks should remain free on the secondary target as a buffer. These are used by the VRM system if the blocks allocated to a device are insufficient.

Calculation example:

- Storage capacity of the failover iSCSI target: 5024 GB
- Number of allocated VIP X1600 devices: 140 (each occupied with four modules)
- Failover block allocation: 8 (minimum)
- Resulting number of allocated failover blocks: $140 \times 4 \times 8 = 4480$
- Resulting number of free failover blocks: $5024 - 4480 = 544$

A buffer of 544 GB remains for recordings in case of a failover; this buffer is also available to the allocated devices if required.

Block reservation for VRM Server downtime (days)

Enter the number of days that the assigned encoders will be recorded although the VRM Server is down.

For example, if you set 4, the encoders will be recorded during approximately 4 days of VRM Server downtime.

If your system has encoders with low bit rate, you can significantly reduce the pre-allocated disk space.

Recording preferences mode

Automatic: Load balancing is configured automatically. Each encoder is automatically assigned 2 iSCSI targets and blocks on these 2 iSCSI targets are assigned to the encoder.

Manual: You can configure load balancing manually in the traditional recording mode.

Sanity check period (days)

Move the slider to configure the required time period. After this time period the iSCSI target is checked and blocks are reassigned if needed.

16.26.1

Advanced page



Main window > **Devices** > Expand

Activate the different logs for VRM Server and Configuration Manager, and specify the retention time for log files in days.

The log files for VRM Server are stored on the computer on which VRM Server has been started, and can be viewed or downloaded with VRM Monitor.

The log files for Configuration Manager are stored locally in the following directory:

C:\Documents and Settings\<User>\My Documents\Bosch\Video Recording Manager\Log

Complete memory dump file

Only activate this option if necessary, for example if the Technical Customer Service team requests a complete summary of the main memory.

Telnet support

Activate this option if access with the Telnet protocol is to be supported. Only activate if necessary.

Caution!

Extensive logging requires considerable CPU power and HDD capacity.

Do not use extensive logging in continuous operation.

16.26.2

SNMP page



Main window > **Devices** > Expand

1. SNMP host address 2. SNMP host address

VRM supports the SNMP V2 (Simple Network Management Protocol) for managing and monitoring network components, and can send SNMP messages (traps) to IP addresses. The unit supports SNMP MIB II in the unified code. If you wish to send SNMP traps, enter the IP addresses of one or two required target units here.

Some events are sent as SNMP traps only. Refer to the MIB file for descriptions.

16.26.3

iSCSI System Access page






Main window > **Devices** > Expand

Allows you to enter a password so that the VRM system can access this iSCSI storage system for configuration.

16.26.4 Default Configuration page



Main window > **Devices** > Expand  > Expand  > Click  > **Default Configuration** tab

Allows you to perform a basic configuration of your iSCSI device. You create LUNs on the iSCSI hard drive and format these LUNs.

Only displayed if the device is one of the iSCSI storage systems supported by Bosch, for example NetApp.

Capacity [MB]

Information on the total capacity of the storage system.

Number of LUNs

You can change the number of LUNs.



Caution!

If you change the number of LUNs, the entire iSCSI system is reorganized and any sequences saved on the system are lost.

Therefore, before making changes, check the recordings and back up any important sequences.

Initialization status (%)

Additional information is displayed during initialization. When initialization is complete (100%), you will also have the opportunity to delete all LUNs again.

Note: On NetApp storage systems, it can take several hours before LUNs are fully deleted. During that time, the total capacity of newly created LUNs can be reduced. You can only create new LUNs with full capacity after the old LUNs have been completely deleted.

RAID-DP (reliability focused)

This option is only displayed for NetApp DSA-N2B20.

Activate this option if you do not wish to use the specified RAID type RAID-4, but would prefer to use the more reliable RAID type RAID-DP.

16.26.5 Load Balancing page



Main window > **Devices** > Expand  > Expand  > Click  > **Load Balancing** tab

Set the upper limits for the permitted bit rate and the number of simultaneous iSCSI connections for each iSCSI system. If these limits are exceeded, data is no longer being written to the iSCSI system and is lost.

For supported systems (for example Bosch RAID, NetApp, DLA), use the default values. For another device see the documentation of this device. Start testing with small values.

Soft limit

Enter a value smaller or equal to the value in the **Hard limit** field. If the values are not exceeded, data is written to the iSCSI device without internal reorganization. If they are exceeded but smaller than the values in the **Hard limit** field, the data is internally reorganized before writing.

Hard limit

These values represent a security margin in relation to the soft limit values. If the write accesses are in this range, internal allocation of addressed blocks must be reorganized. This does not affect the current recording.

If this value is also exceeded, the recording is interrupted for a few seconds and the internal allocation of addressed blocks is reorganized.






If the system as a whole does not provide sufficient bandwidth or iSCSI connections for the allocated devices, this can result in recordings being impossible on a regular basis. If this is the case, increase the available overall bandwidth and/or the number of possible iSCSI connections by adding further storage systems, or reduce the number of cameras recording on the iSCSI system.

16.26.6 iqn-Mapper dialog box

Main window >  **Devices** > Expand  > Expand  > Right-click  > **Map IQNs**

Allows you to start the IQN mapping process.

16.26.7 LUNs page

Main window >  **Devices** > Expand  > Expand  > Expand  > 

Allows you to add, remove, or format LUNs.

Add

Click to display the **Add LUN** dialog box.

Remove

Click to remove the selected LUNs. A message box is displayed.

Format LUN

Click to format the selected LUN. A message box is displayed.

Note:

In the **Format** column, click the check box for the desired LUN.

16.26.8 Add LUN dialog box

Main window >  **Devices** > Expand  > Expand  > Expand  >  >





Click **Add**

Allows you to add a LUN.

Id

Enter the ID of the desired LUN.

16.27 Video Streaming Gateway device page




Main window >  **Devices** > Expand  > Expand  > 

Allows you to add and configure Video Streaming Gateway devices.

See also

- *Adding a Video Streaming Gateway device, 41*

16.28**Assignment tab (Video Streaming Gateway)**

Main window > **Devices** > Expand  > Expand  > 


Allows you to assign cameras to the selected VSG device and to configure the VSG cameras.

Network scan

In the list, select the camera type that you want to display.



Click to assign or de-assign selected cameras to or from VSG.

Note: When you select multiple cameras in the **Network scan** list, select only cameras of the same type, for example only Bosch cameras or only ONVIF cameras. Otherwise the  button is disabled.

Refresh

Click to update the list of scanned cameras.

VSG cameras

Displays the cameras that are assigned to a Video Streaming Gateway device and the lines that are available for assigning a camera.

Add...

Click to display the **Add/Edit** dialog box for assigning a camera to your Video Streaming Gateway device. Allows you to configure properties like IP address or protocol settings.

Note: When you add multiple ONVIF cameras in the **Network scan** list, in the **Token** list only the common tokens are displayed.




Edit... (only available if you select an entry in the VSG cameras list)

Click to display a dialog box for editing the properties of a VSG camera.

See also

- *Adding a Bosch camera to a VSG, 42*

16.29**Add/Edit dialog box (Video Streaming Gateway)**

Main window > **Devices** > Expand  > Expand  > 

URL

In the list, select the IP address or the URL of the desired VSG device.

Bosch device: IP address or DNS name

ONVIF: URL (starts with http)

User name

Type in the user name for logon to the device, usually service.

Password

Type in the password for logon to the device.

Connect


Click to connect to the device and to assign it to VSG.

When logon is successful, configure the protocol settings if required.

Skip

Click to activate the configuration settings in the **Protocol settings** group.

This button does not appear, if you configure a camera that was detected by network scan and

added by clicking . The button appears, if you select a line in the **VSG cameras** list and click the **Add...** or the **Edit...** button.

Protocol settings

Make the desired protocol settings. Note that the available configuration settings change with the selected entry in the **Type** list.

Type

Note: The available configuration settings change with the selected entry.

Entry in the Type list	Available configuration settings
Bosch RCP+	Video input Select the number of the desired camera if you configure a multichannel device.
	Stream Select the number of the stream of the selected camera.
	Protocol TCP Used for transmission in the Internet and / or for lossless data transmission. Ensures that no data packet gets lost. Bandwidth requirement can be high. Use if the device is located behind a Firewall. Does not support multicast. UDP Used for connectionless and lightweight data transmission in private networks. Data packets can get lost. Bandwidth requirement can be low. Supports multicast.
ONVIF	Stream ONVIF Media Profile Contains advanced settings including a specific camera including amongst others the encoding settings.
	Video source Contains basic video settings including a specific camera. Corresponds to a physical video input.
	Token Select a profile number. If you selected Video source , usually only one entry is available.
	Name Displays the display name of the profile if ONVIF Media Profile is selected. If multiple names are available, <multiple> is displayed.

Table 16.1: Protocol settings

VSG Camera Name

Change the camera name if required. This name is used for VRM and for Bosch Video Client.

See also

- Adding a Bosch camera to a VSG, 42
- Adding an ONVIF camera to a VSG, 42

16.30**Recording profiles tab (Video Streaming Gateway)**

Main window > **Devices** > Expand > Expand > Expand >

Allows you to switch recording on or off for each VSG camera.

Recording

In the list, select the desired entry.

See also

- Switching on VSG recording, 43

16.31**Multicast tabs (Video Streaming Gateway)**

Main window > **Devices** > Expand > Expand > Expand >

Allows you to configure multicast for the assigned cameras.

Enable

Click to enable multicast for this camera.

Multicast Address

Insert a valid multicast address (in the range 224.0.0.0 - 239.255.255.255).

Type in 1.0.0.0. A unique multicast address is automatically inserted based on the MAC address of the device.

Port

When a firewall is used, enter a port value that is configured as non-blocked port in the firewall.

Streaming

Click to enable continuous multicast streaming to the switch. This means that the multicast connection is not preceded by a RCP+ registration. The encoder streams always all data to the switch. The switch in return (if no IGMP multicast filtering is supported or configured) sends this data to all ports, with the result that the switch will flood.

You need streaming when using a non-Bosch device for receiving a multicast stream.

See also

- Configuring multicast for VSG, 43

16.32**Advanced tab (Video Streaming Gateway)**

Main window > **Devices** > Expand > Expand > Expand >

Allows you to activate logging for Video Streaming Gateway.

16.33 Live Only page

Main window >  **Devices** > Expand  >

Allows you to add and configure encoders used for live only. You can add Bosch encoders and ONVIF network video transmitters.

16.33.1 ONVIF Encoder page

Main window >  **Devices** > Expand  >

Displays information on a live only ONVIF network video transmitter added to your Bosch Video Management System.

Name

Displays the name of the ONVIF device. You can rename it in the Device Tree directly.

Network Address

Displays the IP address of the device.

Video Inputs

Displays the number of cameras connected to this encoder.

See also

- *Adding a local storage or live only device, 40*

16.33.2 Add ONVIF dialog box

Main window >  **Devices** > Right-click  > Click **Add ONVIF Encoder**

Network Address

Type in the IP address of your ONVIF encoder.

Number of video inputs

Type in the number of cameras connected to this encoder.

See also

- *Adding a local storage or live only device, 40*

16.34 Local Storage page

Main window >  **Devices** > Expand  >

Allows you to add and configure encoders with local storage.

17





Encoders / Decoders page

The count of items below an entry is displayed in square brackets.

To configure an encoder:

Main window >  **Devices** > Expand  > Expand  > Expand  > 

or

Main window >  **Devices** > Expand  > Expand  > 

or

Main window >  **Devices** >  > 

To configure a decoder:

Main window >  **Devices** > Expand  > Expand  > 

Most of the settings on the encoder/ decoder pages are active immediately after you click



. If you click another tab without clicking and changes have occurred, two corresponding message boxes are displayed. Confirm them both if you want to save.

To change the access password right-click the device icon and click **Change password....**

To display the device in a Web browser right-click the device icon and click **Show Webpage in Browser.**

Note:

Depending on the selected encoder or camera, not all pages described here are available for each device. The wording used here for describing the field labels can deviate from your software.

- ▶ Click a tab to display the corresponding property page.

17.1

Main Settings > Unit Access page

17.1.1

Identification / Camera identification

Device name

Type the name of the device.

The name simplifies the management of multiple devices in large systems. The name is used for identification of a device. Use a name that makes it as easy as possible to identify its location.

Do not use any special characters in the name. Special characters are not supported and may cause problems, e.g. with playback.



Click to update the name in the Device Tree.

Device ID

Type the ID of the device.

Camera ID

Type the ID of the camera.

Initiator name

Displays the iSCSI initiator name. The initiator name is automatically displayed after a connection is established.

Initiator extension

Type your own text to make the unit easier to identify in large iSCSI systems. This text is added to the initiator name, separated from it by a full stop.


17.1.2**Camera name****Camera**

Type the name of the camera. Ensure that Camera 1 is allocated to Video Input 1, Camera 2 to Video Input 2, etc.

The camera name facilitates the identification of the remote camera location, for example in case of an alarm. Use a name that makes it as easy as possible to identify the location.

Do not use any special characters in the name. Special characters are not supported and may cause problems, for example the play back of recordings. The settings on this page apply to all camera inputs.



Click  to update the name in the Device Tree.

17.1.3**Version information****Hardware version**

Displays the version of the hardware.

Firmware version

Displays the version of the firmware.

17.2**Main Settings > Date/Time page**

If there are multiple units operating in your system or network, it is necessary to synchronize their internal clocks.

Device date format Device date Device time

If there are multiple devices operating in your system or network, it is important to synchronize their internal clocks. For example, it is only possible to identify and correctly evaluate simultaneous recordings when all devices are operating on the same time.

Synchr. PC

Click to apply the system time from your computer to the device.

Device time zone

Select your time zone from the list.

Daylight saving time

Set by Bosch VMS Management Server.

Time server IP address

Set by Bosch VMS Management Server.

Time server type

Set by Bosch VMS Management Server. Default setting is SNTP .

17.3**Advanced Settings > Video Input page****17.3.1****Picture settings**

Allows you to adjust each video image to your requirements. All changes are displayed immediately. Be aware that changes in the image quality affects processor performance.

Video

Enter the number of the camera you want to adjust. If you want to do this for each camera, enter the number of the camera, adjust the settings (brightness, contrast, etc.), and then enter the next camera number, and adjust their settings.

Brightness

Enter the value to adjust the brightness of the video image to your working environment.

Contrast

Enter the value to adjust the contrast of the video image to your working environment.

Saturation

Enter the value to adjust the color saturation of the video image on your monitor as realistic as possible.

Low-pass filter

Enter the value to remove very fine noise from the image. This reduces and optimizes the bandwidth necessary for the image transmission over the network. The image resolution may be impaired. The higher the value, the flatter the image signal.

Default

Click to change the current settings to the factory settings.

Show Image

Click to display the image window of the encoder. In the menu bar of the video image you can select the video input that you want to display.

17.3.2**Input termination**

Allows you to activate or deactivate the 75 Ohm terminating resistor for each video input. The numbering follows the labeling of the video inputs on the device. Every video input is closed at the time of delivery.

75 Ohm termination

Select one of the following:

- **Off:** Deactivates the 75 Ohm terminating resistor and loops through the video signal.
- **On:** Activates the 75 Ohm terminating resistor. No loop through of the video signal.


17.3.3**Source type**

Allows you to connect video recorders as video source. Video recorders require a more tolerant setting as a result of unwanted effects caused by the mechanical components of a video recorder.

Input 1-Input 4

Select **VCR** to connect video recorders as video source. Select **Camera** to connect cameras. In some cases, selecting **VCR** also for cameras can lead to an improvement in the video image.

17.4**Advanced Settings > Recording Management page**

Active recordings are indicated by .

Point to the icon. Detailed information about the active recordings are displayed.

Management mode

Specify how the device's recordings should be managed:

- **Recordings manually managed**
The recordings are managed locally on the device. All relevant settings must be carried out manually. The device is removed from the VRM system.
If activated, no further settings are required on this page.

- **Recording 1 managed by VRM**
The recordings of this device are managed by the VRM system, which is considered external from the point of view of the device.
If activated, no further settings are required on this page.
- **Recording 1 managed by VRM - Recording 2 used for ANR**
Not supported.

Recording media

You can record the images on various local storage media or on an appropriately configured iSCSI system. For long-term, authoritative images in stationary operation, it is essential that you use an appropriately sized iSCSI system.

Select the required recording media.

iSCSI Media

- **iSCSI IP address**
Type the IP address of the required iSCSI destination.
- **Password**
Type the password for iSCSI media.
- **Read**
Click to establish the connection to the IP address. In the Storage overview, the corresponding logical drives are displayed.
- **Add**
Click to add a media to the **Managed storage media** list.
- **Remove**
Click to remove a media from the **Managed storage media** list.

Managed storage media

The managed storage media are displayed.

Overwrite older recordings

Recording 1 / Recording 2: If activated, the oldest recordings are deleted as soon as the medium is full. A loop recording process occurs.

If not activated, nothing more is saved to the medium once it is full.

17.5

Advanced Settings > Recording preferences page

The **Recording preferences** page is displayed for each encoder. This page only appears if a device is assigned to a VRM system.

[MISSINGDISPLAYTEXT: 000357BB_CameraEditor_Mode_0: Mode]

Select the required option.

- **All**
The VRM system discovers all available and configured iSCSI targets and displays the available capacity automatically. If a target fails or memory capacity is used, another target is selected automatically. In this case, you cannot enter targets on the tab.
- **Restricted**
Recordings are stored primarily to the targets entered here. Primary target and secondary target are used equivalently.
If no disk space is available on either of the targets entered, other storage blocks of the VRM system are used until there is space available again on the entered targets.
- **Failover**
Recordings are saved only to primary target. If it is not possible to save to this target, the recording will be saved to the target entered under secondary target.
You can leave the second list empty. In this case no failover is possible but the number of required iSCSI sessions is reduced.

– **Preferred**

Recordings are saved to the entered targets in the specified sequence. For this, enter both a primary and a secondary target. The secondary target is only used while the primary target has no storage capacity available.

Only if these targets are not available, the recordings will be distributed across other targets.

Primary target

Select the entry for the required target, if you have selected a setting other than **All** under **[MISSINGDISPLAYTEXT: 000357BB_CameraEditor_Mode_0: Mode]**.

Secondary target

Select the entry for the required target if you have selected **Failover** under **[MISSINGDISPLAYTEXT: 000357BB_CameraEditor_Mode_0: Mode]**.

If you have selected **Restricted**, **Failover**, or **Preferred**, entering a secondary target is optional. **Restricted** and **Preferred** without a second target are identical.

17.6

Advanced Settings > VCA page

The device contains an integrated Video Content Analysis (VCA), which can detect and analyze changes in the signal using image processing algorithms. Such changes are triggered by motion in the camera's field of view.

If there is not enough computing power, priority is given to live images and recordings. This can lead to impairment of the VCA system. Observe the processor load and optimize the settings of the device or the VCA settings, if necessary.

VCA configuration

You can configure profiles with different VCA configurations. You can save profiles on your computer's hard drive and load saved profiles from there. This can be useful if you want to test a number of different configurations. Save a functioning configuration and test new settings. You can use the saved configuration to restore the original settings at any time.

- ▶ Select a VCA profile and change the settings if necessary.

To rename the VCA profile:

- ▶ Click . The **Edit** dialog box is displayed. Type the new name, and then click **OK**.

Preset

Select the preset if required.

Alarm status

Displays the current alarm state to check the effects of your settings immediately.

Aggregation time [s]

You can set an aggregation time of between 0 and 20 seconds if necessary. The aggregation time always starts when an event occurs. All following events that occur during the aggregation time are counted as one event. This ensures that events following in quick succession do not trigger many alarms. During the aggregation time no further event is counted.

The post-alarm time set for alarm recordings only starts once the aggregation time has expired.

Analysis type

Select the analysis algorithm. By default, only MOTION+ is available. MOTION+ offers a motion detector and essential tamper detection functionality.

Additional analysis algorithms with comprehensive functions, such as IVA, are available from Bosch Security Systems.

Metadata is always created for a video content analysis, unless this was explicitly excluded. Depending on the analysis type selected and the relevant configuration, additional information overlays the video image in the preview window next to the parameter settings. With the MOTION+ analysis type, for example, the sensor fields in which motion is recorded will be marked with rectangles.

Motion detector

See *Motion detector (MOTION+ only)*, 133.

Tamper detection

See *Tamper detection*, 134

Load...

Click to load a saved profile. The **Open** dialog box is displayed. Select the filename of the profile you want to load, and then click **OK**.

Save...

Click to save the profile settings to another file. The **Save** dialog box is displayed. Type the filename, select the folder where to save the file, and then click **OK**.

Default

Click to return all settings to their default values.

17.6.1**Motion detector (MOTION+ only)**

Reflections of light (from glass surfaces, etc.), lights switching on and off, or changes in the light level caused by cloud movement on a sunny day can trigger unintended responses from the motion detector and generate false alarms. For indoor surveillance, ensure constant lighting of the areas during the day and at night. Run a series of tests at different times of the day and night to ensure that the video sensor is operating as intended.

Debounce time 1s (MOTION+ only)

The debounce time is intended to prevent very brief events from triggering individual alarms. If the **Debounce time 1s** option is activated, an event must last at least 1 second to trigger an alarm.

Select Area...

Click to configure the areas to be monitored by the motion detector. The **Select Area** dialog box is displayed.

See *Select Area dialog box*, 133.

Sensitivity (only with MOTION+ functionality)

Move the slider to adjust the sensitivity of the motion detector. The motion detector reacts to variations in the brightness of the video image. The darker the observation area, the higher the value that must be selected.

Minimum object size (only with MOTION+ functionality)

Specify the number of sensor fields that a moving object must cover to generate an alarm.

This settings prevents small objects from triggering an alarm.

A minimum value of 4 is recommended. This value corresponds to four sensor fields.

17.6.2**Select Area dialog box**

This dialog box displays the camera image. Within this window you can activate the areas of the image to be monitored.

To activate an area:

In the camera image, drag over the area you want to activate. Activated areas are marked yellow.

To deactivate an area:

In the camera image, press the SHIFT key and click the area you want to deactivate.

To obtain commands in the window:

To see the commands for activating or deactivating the areas, right-click anywhere in the window. The following commands are available:

- **Undo**
Undoes the last command.
- **Set All**
Activates the entire camera image.
- **Clear All**
Deactivates the entire camera image.
- **Tool**
Defines the shape of the mouse pointer.
- **[MISSINGDISPLAYTEXT: 000357BB_DeviceResourceView_Settings_0: Settings]**
Displays the Editor Settings dialog box. In this dialog box you can change the sensitivity and the minimum object size.

17.6.3**Tamper detection**

You can detect tampering of cameras and video cables by means of various options. Run a series of tests at different times of the day and night to ensure that the video sensor is operating as intended.

The options for tamper detection can only be set for fixed cameras. Dome cameras or other motorized cameras cannot be protected in this manner as the movement of the camera itself causes changes in the video image that are too great.

Scene too bright

Select the check box if tampering associated with exposure to extreme light (for instance, shining a flashlight directly on the lens) should trigger an alarm. The average brightness of the scene provides a basis for recognition.

Global change

Select the check box if the changes, set with the **Global change** slider, should lead to trigger an alarm.

Move the slider to set how large the changes in the video image must be for an alarm to be triggered. Set a high value if changes that occur simultaneously in few areas should lead to trigger an alarm. Set a low value if changes that occur simultaneously in a large number of areas should lead to trigger an alarm. This setting allows you to detect, independently of motion alarms, manipulation of the orientation or location of a camera resulting from turning the camera mount bracket.

This setting is independent of the areas selected in the **Select Area** window (see *Select Area dialog box*, 133).

Scene too dark

Select the check box if tampering associated with covering the lens (for instance, by spraying paint on the lens) should trigger an alarm. The average brightness of the scene provides a basis for recognition.

Scene too noisy

Select the check box if tampering associated with EMC interference (noisy scene as the result of a strong interference signal in the vicinity of the video lines) should trigger an alarm.

17.7

Advanced Settings > Audio Alarm page

Some encoders can create alarms on the basis of audio signals. You can configure signal strengths and frequency ranges in such a way that false alarms, for example due to machine noise or background noise, are avoided.

Note: First set up normal audio transmission before you configure the audio alarm.

See *Camera > Audio page, 142*

Audio alarm

Select **On** if you want the device to generate audio alarms.

Name

Enter a unique and clear name. The name makes it easier to identify the alarm in extensive video monitoring systems.

Caution!

Do not use any special characters, for example &, in the name.

Special characters are not supported by the internal recording management and may therefore result in the Bosch VMS Archive Player being unable to play back the recording.

Signal Ranges

You can exclude particular signal ranges in order to avoid false alarms. For this reason the total signal is divided into 13 tonal ranges (mel scale). Select or clear the boxes below the graphic to include or exclude individual ranges.

Threshold

Set up the threshold on the basis of the signal visible in the graphic. You can set the threshold using the slide control or, alternatively, you can move the white line directly in the graphic using the mouse.

Sensitivity

You can use this setting to adapt the sensitivity to the sound environment. You can effectively suppress individual signal peaks. A high value represents a high level of sensitivity.

17.8

Advanced Settings > Alarm Rules page

The device features an alarm rule engine. In its simplest form, an alarm rule can define which input activate which output. Basically, an alarm rule allows you to customize a device to automatically respond to different alarm inputs.

Enabled

Select the check box to activate the alarm.

[MISSINGDISPLAYTEXT: 000357BB_G4adAlarmRules_Input #_0: Input]

Select an entry.

- **Local Input 1:** a physical alarm connection.
- **Local Input 2:** a physical alarm connection.
- **IVA/MOTION+:** An alarm when IVA or motion detection is activated.
- **Connection:** An alarm when an attempt is made to access the camera's IP address.

Output 1 / Output 2

Select an entry for each output.

- **None:** no defined command.
- **Aux On:** Defines a standard or custom keyboard ON command.
- **Aux Off:** Defines a standard or custom keyboard OFF command.
- **Shot:** Defines a preset scene from shot 1-64.

17.9 Camera > Display Stamping page

**Notice!**

Not supported in Bosch Video Management System.

This function allows you to display important supplementary information in the video image. These information can be enabled individually.

Camera name stamping

Set the position of the camera name overlay.

Click the item you want to select.

- **Off**
No camera name is displayed in the video image.
- **Bottom**
The camera name is displayed at the bottom of the video image.
- **Top**
The camera name is displayed on the top of the video image.
- **Custom**
Enter the position where the camera name is displayed in the video image.

Time stamping

Sets the position of the time overlay.

Click the item you want to select.

- **Off**
No time and date is displayed in the video image.
- **Bottom**
The time and date is displayed at the bottom of the video image.
- **Top**
The time and date is displayed on the top of the video image.
- **Custom**
Enter the position where the time and date is displayed in the video image.

Display milliseconds

If necessary, you can also display milliseconds. This information can be useful for recorded video images; however, it does increase the processor's computing time.

Click the item you want to select.

- **On**
Milliseconds are displayed in the video image.
- **Off**
Milliseconds are not displayed in the video image.

Alarm mode stamping

If necessary, a text message is displayed in the image in case of an alarm.

- **On**
A text message is displayed in the video image.
- **Off**
No text message is displayed in the video image.
- **Custom**
Enter the position where the text message is displayed in the video image.

Displayed alarm message

Type the message to be displayed in case of an alarm. The maximum text length is 31 characters.

Click the item you want to select.

- **On**
In case of an alarm a message is displayed in the video image.
- **Off**
No alarm message is displayed in the video image.
- **Custom**
Enter the position where a message is displayed in the video image.

Title OSD

OSD titles can be displayed at a position of your choice.

- **On**
Continuously displays sector or shot title overlays in the image. Enter the position.
- **Off**
Does not displays sector or shot title overlays in the image.
- **Momentary**
Continuously displays sector or shot title overlays in the image for a few seconds. Enter the position.

Camera OSD

Displays camera information, such as Digital Zoom, Iris open/close, and Focus near/far overlays in the image.

- **On**
Displays camera information in the window. Enter the position.
- **Off**
Does not display camera information in the window.

Video watermarking

Allows you to provide the transmitted images with a watermark.

- **On**
Activates watermarking. After activation, all images are marked with a green **W**. A red **W** indicates that the sequence (live or saved) has been manipulated.
After activation, all images are marked with an icon.
- **Off**
No watermarking.

17.10

Camera > Privacy Masks page

Privacy Masking is used to block out an area of a scene from being viewed and recorded. For example, you might want to hide public places adjacent to your property. You can define 15 privacy masks in total.

Hide masks

To hide all masks from an image view, select the check box.

Privacy masks

Select the privacy mask number. The preview window displays a gray rectangle in the scene.

Enabled

Select the check box to activate the privacy mask. After saving, the content inside the privacy mask is no longer visible in the preview. This area is blocked out from being viewing and recording.

Pattern

Pattern of the privacy mask.

Preview window

If necessary, change the size of the privacy mask area and move it to the position you want.

17.11**Camera > Camera page****White Balance**

Adjusts the color settings to maintain the quality of the white areas of the image.

- **ATW:** Allows the camera to continuously adjust color reproduction.
- **Indoor:** White balance tracking for indoor use.
- **Outdoor:** White balance tracking for outdoor use.
- **AWB Hold:** Places the ATW on hold and saves the color settings.
- **Extended ATW** (default): Allows the camera to constantly adjust for optimal color reproduction.
- **Manual:** Red and Blue gain can be manually set to a desired position.

Red Gain

The red gain adjustment offsets the factory white point alignment (reducing red introduces more cyan).

Blue Gain

The blue gain adjustment offsets the factory white point alignment (reducing blue introduces more yellow). It is only necessary to change the white point offset for special scene conditions.

Gain Control

Adjusts the automatic gain control (AGC). Automatically sets the gain to the lowest possible value needed to maintain a good picture.

- **Fixed:** no enhancement. This setting disables the Max. Gain Level option.
If you select this option, for example the AutoDome Junior HD makes the following changes automatically:
 - **Night Mode:** Switches to value **Color**.
 - **Auto Iris:** Switches to value **Constant**.
- AGC (default): electronically brightens dark scenes, which may cause graininess in low light scenes

Max Gain Level

Controls the maximum value the gain can have during AGC operation. To set the maximum gain level, choose from:

- **Normal**
- **Medium**
- **High**

Sharpness

Adjusts the sharpness of the picture. To set the sharpness, type a value between 1 and 15 inclusive. The default setting is 12.

Shutter Mode

- **Off:** Turns the Auto SensUP off.
- **Auto SensUp:** Increases camera sensitivity by increasing the integration time on the CCD. This is accomplished by integrating the signal from a number of consecutive video frames to reduce signal noise.
If you select this option, for example the AutoDome Junior HD makes the following change automatically:

- **Auto Iris:** Switches to value **Constant**.

Shutter

Adjusts the electronic shutter speed (AES). Controls the time period for which light is gathered by the collecting device. The default setting is 1x (60 Hz: 1/30, 50 Hz: 1/25)

Auto SensUp Maximum

Sets the Auto SensUp minimum value. The Auto SensUp Min. value is the factor by which the sensitivity of the camera is increased. The default setting is 15x

Backlight Comp

- **On:** Optimizes the video level for the selected area of the image. Parts outside this area may be underexposed or overexposed.
- **Off:** default setting

Stabilization

- **On:** Turns on video stabilization.
- **Off:** Turns off video stabilization.

Night Mode

Selects night mode (Black/White) to enhance lighting in low light scenes. Select from the following options:

- **Monochrome:** Forces the camera to stay in Night Mode and transmit monochrome images.
- **Color:** The camera does not switch to Night Mode regardless of ambient light conditions.
- **Auto:** The camera switches out of Night Mode after the ambient light level reaches a pre-defined threshold.

Night Mode Threshold

Adjusts the level of light at which the camera automatically switches out of night mode (B/W) operation. Select a value between 10 and 55 (in increments of 5), where 10 is earlier and 55 is later.

17.12

Camera > Lens page

17.12.1

Focus

Autofocus

Continuously adjusts the lens automatically to the correct focus for the sharpest picture.

- **One push** (default): Activates the Auto Focus feature after the camera stops moving. Once focused, Auto Focus is inactive until the camera is moved again.
- **Auto focus:** Auto Focus is always active.
- **Manual:** Auto Focus is inactive.

Focus Polarity

- **Normal** (default): Focus controls operate normally.
- **Reverse:** Focus controls are reversed.

Focus Speed

Controls how fast the Auto focus will readjust when the focus becomes blurred. Select from the following options:

- **Super slow**
- **Slow**
- **Medium**
- **Fast**

17.12.2

Iris

Auto Iris

Automatically adjusts the lens to allow the correct illumination of the camera sensor. This type of lens is recommended for use when there are low light or changing light conditions.

- **Constant** (default): Camera constantly adjusts to varying light conditions.
If you select this option, for example the AutoDome Junior HD makes the following changes automatically:
 - **Gain Control**: switches to AGC
 - **Shutter Mode**: switches to Normal
- **Manual**: Camera must be manually adjusted to compensate for varying light conditions.

Iris Polarity

Capability to reverse the operation of the iris button on the controller.

- **Normal** (default): Iris controls operate normally.
- **Reverse**: Iris controls are reversed.

Auto Iris Level

Increases or decreases brightness according to the amount of light. Type a value between 1 and 15, inclusive. The default setting is 8.

Iris Speed

Controls how fast the Iris will adjust the opening according to the illumination of the scene. Type a value between 1 and 10, inclusive. The default setting is 5.

17.12.3

Zoom

Max Zoom Speed

Controls the zoom speed. Default setting: **Fast**

Zoom Polarity

Capability to reverse the operation of the zoom button on the controller.

- **Normal** (default): Zoom controls operate normally.
- **Reverse**: Zoom controls are reversed.

Digital Zoom

Digital zoom is a method of decreasing (narrowing) the apparent angle of view of a digital video image. It is accomplished electronically, without any adjustment of the camera's optics, and no optical resolution is gained in the process.

- **Off** (default): Enables the Digital Zoom feature.
- **On**: Disables the Digital Zoom feature.

17.13

Camera > PTZ page

Auto Pan Speed

Continuously pans the camera at a speed between right and left limit settings. Type a value between 1 and 60 (expressed in degrees), inclusive. The default setting is 30.

Inactivity

Selects the time period the dome must be not controlled until the inactivity event will be executed.

- **Off** (default): Camera remains on a current scene indefinitely.
- **Scene 1**: Camera returns to Preset 1.
- **Previous Aux**: Camera returns to the previous activity.

Inactivity Period

Determines the behavior of the dome when the control for dome is inactive. Select a time period from the pull-down list (3 sec. - 10 min.). The default setting is 2 minutes.

Auto Pivot

The Auto Pivot tilts the camera through the vertical position as the camera is rotated to maintain the correct orientation of the image.

Set the Auto Pivot to **On** (default) to automatically rotate the camera 180° when following a subject traveling directly beneath the camera. To disable this feature, click **Off**.

Freeze Frame

Select **On** (default) to freeze the image while the camera moves to a predetermined scene position.

Tilt up limit

Click **Set**, to set the upper tilt limit of the camera.

Tilt limits

Click **Reset** to clear the upper tilt limit.

17.14**Camera > Prepositions and Tours page**

Allows you to define the individual scenes and a preposition tour comprised of the defined scenes.

To add scenes:

Click .

To delete scenes:

Select the scene, then click .

To overwrite (save) scenes:

Click .

To view scenes:

Select the scene, then click .

Include in standard tour (marked with *)

Select the check box if the scene should be part of the preposition tour. The asterisk (*) on the left of the scene name indicates this.

17.15**Camera > Sectors page****Sector**

The pan capability (for example for the AutoDome Junior HD camera) is 360° and is divided into eight equal sectors. This allows you to apply a title for each sector and to designate any sectors as a Blanked Sector.

To define a title for sectors:

1. Place the pointer in the input box to the right of the sector number.
2. Type a title for the sector, up to 20 characters long.
3. To blank the sector, click the check box to the right of the sector title.

17.16**Camera > Installer Menu page****Main frequency**

Sets the frequency of the incoming power supply. This setting is made at the factory and should not be changed.

Orientation

Reverses the image 180° (ideal when mounting upside down). Set the orientation to **Normal** (default) or **Inverted**.

SC settings

Click **Default** to restore all cameras settings to their original defaults.

SC data

Click **Default** to clear all preposition, privacy mask, and other user settings.

17.17**Camera > Misc page****Address**

Allows the appropriate device to be operated via the numerical address in the control system. Type a number between 0000 and 9999, inclusive, to identify the camera.

17.18**Camera > Logs page**

This page allows you to display and to save log files.

Download

Click to obtain the log file information. The log files are displayed in the overview.

Save

Click to save the log files.

17.19**Camera > Audio page**

This function allows you to set the gain of the audio signals to suit your specific requirements. The current video image is shown in the small window next to the slide controls to help you check the selected audio source and improve assignments. Your changes are effective immediately.


The numbering of the audio inputs follows the labeling on the device and the assignment to the respective video inputs. The assignment cannot be changed for Web browser connections.

Audio


The audio signals are sent in a separate data stream parallel to the video data, and so increase the network load. The audio data are encoded according to G.711 and require an additional bandwidth of approximately 80 kbps for each connection.

- **On:** Transmits audio data.
- **Off:** No transmission of audio data.

Line In 1 - Line In 4

Enter the value of the gain of the audio signal. Make sure that the display of the slider  remains green.

Line Out

Enter the value of the gain. Make sure that the display of the slider  remains green.

Microphone (MIC)

Enter the value of the gain for the microphone.

[MISSINGDISPLAYTEXT: 000357BB_Audio_Line OutSpeaker (SPK)_0: Line Out/Speaker (SPK)]

Enter the value of the gain of the line and the loudspeaker.

Recording format

Select a format for audio recording.

G.711: default value.

L16: Select L16 if you want better audio quality with higher sampling rates. This requires approximately eight times the G.711 bandwidth.

17.20

Interfaces > Relay page

This function allows you to configure the switching behavior of the relay outputs.

You can configure the switching behavior of the relay outputs. For each relay, you can specify an open switch relay (normally closed contact) or a closed switch relay (normally open contact).

You can also specify whether an output should operate as a bistable or monostable relay. In bistable mode, the triggered state of the relay is maintained. In monostable mode, you can set the time after which the relay returns to the idle state.

You can select different events that automatically activate an output. It is possible, for example, to turn on a floodlight by triggering a motion alarm and then turning the light off again when the alarm has stopped.

Idle state

Select **Open** if you want the relay to operate as an NO contact, or select **Closed** if the relay is to operate as an NC contact.

Operating mode

Select an operating mode for the relay.

For example, if you want an alarm-activated lamp to stay on after the alarm ends, select the **Bistable** entry. If you wish an alarm-activated siren to sound for ten seconds, select the 10 s entry.

Relay follows

If required, select a specific event that will trigger the relay. The following events are possible triggers:

Off: Relay is not triggered by events

Connection: Trigger whenever a connection is made

Video alarm: Trigger by interruption of the video signal at the corresponding input

Motion alarm: Trigger by motion alarm at the corresponding input, as configured on the VCA page.

Local input: Trigger by the corresponding external alarm input

Remote input: Trigger by remote station's corresponding switching contact (only if a connection exists)

Note:

The numbers in the lists of selectable events relate to the corresponding connections on the device, Video alarm 1, for example to the Video In 1 connection.

Trigger relay

Click the relay button to trigger the relay manually (for example, for testing purposes or to activate a door opener).

The relay button displays the state of each relay.

Red: Relay is activated.

Blue: Relay is not activated.

17.21

Interfaces > Periphery page

17.21.1

COM1

This function allows you to configure the serial interface parameters according to your requirements.

If the device is working in multicast mode, the first remote location to establish a video connection to the device is also assigned the transparent data connection. However, after about 15 seconds of inactivity the data connection is automatically terminated and another remote location can exchange transparent data with the device.

Serial port function

Select a controllable device from the list. Select Transparent data to transmit transparent data via the serial port. Select Terminal to operate the device from a terminal.

After selecting a device, the remaining parameters in the window are set automatically and should not be changed.

Baud rate (bps)

Select the value for the transmission rate.

Stop bits

Select the number of stop bits per character.

Parity check

Select the type of parity check.

Interface mode

Select the protocol for the serial interface.

17.22

Network > Network Access page

The settings on this page are used to integrate the device into an existing network.

Note:

After changing the Subnet mask and/or the Gateway address, restart the computer.

Subnet mask:

Type the subnet mask number of the device obtained from your network administrator.

Gateway address

Type the IP address for the gateway to connect the device to a remote location in a different subnet. Otherwise, this box can remain empty (0.0.0.0).

DNS server address

Type the IP address of the DNS server for this device.

Units listed on a DNS server are easier to access. To establish an Internet connection to the device, it is sufficient to enter the name of the device - used in the DNS server - as URL in the browser. Secure and dynamic DNS servers are supported.

Video transmission

Select TCP as protocol for units used behind firewalls. Select UDP for units used in a local network.

Note:

- UDP supports multicast. TCP does not. The Maximum Transmission Unit (MTU) value in UDP mode is 1514 bytes.
- Bosch VMS NVR only supports UDP.

HTTP browser port

Select the HTTP browser port from the list. The default port is 80. To limit connection to HTTPS, deactivate the HTTP port. To do this, select **Off**.

HTTPS browser port

Not supported.

RCP+ port 1756

Select **On** to allow unencrypted connections on this port. Select **Off** to allow only encrypted connections (not supported).

Telnet support

Select **On** to allow unencrypted connections on this port. Select **Off** to allow only encrypted connections (not supported).

Interface mode ETH 1 / Interface mode ETH 2

If necessary select the value for the interface, for example 100 Mbps HD. This value is device dependent and must be set individually.

Network MSS [Byte]

Enter the maximum segment size (MSS) for the IP packet's user data.

This setting allows you to adjust the size of the data packets to the network environment and to optimize data transmission. Observe the MTU value of 1514 bytes in UDP mode.

iSCSI MSS [Byte]

Enter the Maximum Segment Size (MSS) for a connection to the iSCSI system.

The maximum segment size for a connection to the iSCSI system can be higher than for the other data traffic via the network. The size depends on the network structure. A higher value is only useful if the iSCSI system is located in the same subnet as the device.

MAC address

Displays the MAC address.

17.23**Network > Advanced page****17.23.1****SNMP**

The device supports the SNMP V2 (Simple Network Management Protocol) for managing and monitoring network components, and can send SNMP messages (traps) to IP addresses. The device supports SNMP MIB II in the unified code.

SNMP

Select **On** to activate the SNMP function.

1. SNMP host address / 2. SNMP host address

Type the IP addresses of one or two target units. The device (for example encoder, camera) sends SNMP traps automatically to the target units.

If you do not enter IP addresses, the device only replies to SNMP requests and does not send SNMP traps to the target units.

SNMP traps

Allows you to select which traps the device sends to the target units. To do this, click **Select**. The **SNMP traps** dialog box is displayed.

SNMP traps dialog box

Select the check boxes of the appropriate traps, and then click **OK**.

17.23.2**802.1x**

IEEE 802.1x allows you to communicate with the device if a RADIUS server is used in a network.

Authentication

Select **On** to activate 802.1x.

Identity

Type the user name that the RADIUS server uses for identifying the device.

Password

Type the password that the RADIUS server uses for identifying the device.

17.23.3 Encryption

A special license, with which you will receive a corresponding activation key, is required to encrypt user data. You can enter the activation key to release the function on the Licenses page.

See also:

Service > Licenses page, 148

17.23.4 RTSP

RTSP port

If necessary, select a different port for the exchange of the RTSP data. The default port is 554.

Off disables the RTSP function.

17.23.5 NTCIP

Specifies a set of rules and protocols for organizing, describing and exchanging transportation management information between transportation management applications and transportation equipment such that they interoperate with each other.

NTCIP

Select a port from the list.

Address

Select the address from the list.

17.23.6 UPnP

You can activate the universal plug and play function (UPnP). When activated the camera reacts on requests from the network and will be registered automatically as a new network device on the inquiring computers. The access to the camera is then possible using the Windows file explorer, and without knowledge of the camera's IP address.

Note:

In order to use the UPnP function on a computer with Windows XP or Windows Vista, the Universal Plug and Play Device Host and the SSDP Discovery services must be activated.

17.23.7 TCP metadata input

This feature allows a device to receive data from an external TCP sender, for example an ATM or POS device, and store it as metadata.

TCP port

Select the port for TCP communication. Select **Off** to deactivate the TCP metadata function.

Sender IP address

Type the IP address of the TCP metadata sender here.

17.24 Network > Multicast page

In addition to a 1:1 connection between an encoder and a single receiver (unicast), the device enables multiple receivers to receive the video signal from an encoder simultaneously.

The device either duplicates the data stream itself and then distributes it to multiple receivers (Multi-unicast) or it sends a single data stream to the network, where the data stream is simultaneously distributed to multiple receivers in a defined group (Multicast). You can enter a dedicated multicast address and port for each stream.

The prerequisite for multicast operation is a multicast-capable network that uses the UDP and IGMP protocols. Other group management protocols are not supported. The TCP protocol does not support multicast connections.

A special IP address (class D address) must be configured for multicast operation in a multicast-enabled network. The network must support group IP addresses and the Internet Group Management Protocol (IGMP V2). The address range is from 225.0.0.0 to 239.255.255.255. The multicast address can be the same for multiple streams. However, it is then necessary to use a different port in each case so that multiple data streams are not sent simultaneously using the same port and the same multicast address.

Note: The settings must be done for each encoder (video input) and for each stream individually. The numbering follows the labeling of the video inputs on the device.

Enable

To enable simultaneous data reception on several receivers you need to activate the multicast function. To do this, select the check box. Then enter the multicast address.

Multicast Address

Enter a valid multicast address for each stream from the relevant encoder (video input) to be operated in multicast mode (duplication of the data streams in the network).

With the setting 0.0.0.0 the encoder for the relevant stream operates in multi-unicast mode (copying of data streams in the device). The device supports multi-unicast connections for up to five simultaneously connected receivers.

Note: Duplication of data places a heavy demand on the device and can lead to impairment of the image quality under certain circumstances.

Port

Assign a different port to each data stream if there are simultaneous data streams at the same multicast address.

Enter the port address of the required stream here.

Streaming

Select the check box to activate multicast streaming mode for the relevant stream. The device even streams multicast data if no connection is active.

For normal multicast operation, streaming is typically not required.

Packet TTL (only for Dinion IP, Gen4 and FlexiDome)

Enter a value to specify how long the multicast data packets are active on the network. If multicast is to be run via a router, the value must be greater than 1.

17.25

Network > FTP Posting page

17.25.1

JPEG posting

This function allows you to save individual JPEG images on an FTP server at specific intervals. Then, retrieve these images at a later date to reconstruct alarm events, if required.

Image size

Select the resolution for the JPEG images.

File name

Select how file names are created for the individual images that are transmitted.

- **Overwrite**
The same file name is always used. An existing file is overwritten by the current file.
- **Increment**
A number from 000 to 255 is added to the file name and automatically incremented by 1. When the number reaches 255, the number starts again from 000.
- **Date/time suffix**
The date and time are automatically added to the file name. Ensure that the date and time of the device are always set correctly. For example, the file snap011008_114530.jpg was stored on October 1, 2008 at 11.45 and 30 seconds.

Posting interval (s; 0 = Off)

Enter the interval in seconds at which the images is sent to an FTP server. Enter zero for no images to be sent.

17.25.2**FTP server****FTP server IP address**

Type the IP address of the FTP server on which to save the JPEG images.

FTP server login

Type your login name for the FTP server.

FTP server password

Type the password for the FTP server.

Path on FTP server

Type the exact path where to save the images on the FTP server.

Post JPEG from camera

Select the check box to activate the camera input for the JPEG image. The numbering follows the labeling of the video inputs on the device.

Max. bit rate

You can limit the bit rate for FTP posting.

17.26**Service > Licenses page**

This page allows you to enable additional functions or software modules.

Installation code

Displays the installation code.

Activation key

Type the activation key. The activation key cannot be deactivated and is not transferable to other units. The activation key cannot be deactivated again and is not transferable to other units.

Installed licenses

Displays the installed licenses after their activation.

17.27**Decoder > Decoder page****17.27.1****Decoder profile**

Allows you to set the various options for the display of video images on an analog monitor or VGA monitor.

Monitor name

Type the name of the monitor. The monitor name facilitates the identification of the remote monitor location. Use a name that makes it as easy as possible to identify the location.



Click  to update the name in the Device Tree.

Standard

Select the video output signal of the monitor you are using. Eight pre-configured settings for the VGA monitors are available in addition to the PAL and NTSC options for analog video monitors.

Caution!

Selecting a VGA setting with values outside the technical specification of the monitor can result in severe damage to the monitor. Refer to the technical documentation of the monitor you are using.

Window layout

Select the default image layout for the monitor.

VGA screen size

Type the aspect ratio of the screen (for example 4 x 3) or the physical size of the screen in millimeters. The device uses this information to accurately scale the video image for distortion-free display.

17.27.2**Monitor display**

The device recognizes transmission interruptions and displays a warning on the monitor.

Display transmission disturbance

Select **On** to display a warning in case of transmission interruption.

Disturbance sensitivity

Move the slider to adjust the level of the interruption that triggers the warning.

Disturbance notification text

Type the text of the warning the monitor displays when connection is lost. The maximum text length is 31 characters.

Delete decoder logo

Click to delete the logo that has been configured on the Web page of the decoder.

18 Maps and Structure page

The count of items below an entry is displayed in square brackets.



Main window > **Maps and Structure**

Permissions can get lost. If you move a group of devices, these devices lose their permission settings. You must set the permissions on the **User Groups** page again.

Displays the Device Tree, the Logical Tree, and the map window.

Allows you to introduce a structure for all the devices in your Bosch Video Management System. Your structure is displayed in the Logical Tree.

Allows you to perform the following tasks:

- Configuring the Full Logical Tree
- Managing resource files, assigning them to nodes
- Creating hot spots on a map

Resource files can be:

- Site map files
- Document files
- Web files
- Audio files
- Command Scripts
- Camera sequence files

Hot spots can be:

- Cameras
- Inputs
- Relays
- Command Scripts
- Sequences
- Links to other maps



Displays a dialog box for managing resource files.



Displays a dialog box for adding a Command Script to the Logical Tree.



Displays a dialog box for adding a camera sequence file.



Displays a dialog box for adding a node.




Displays a dialog box for adding map resource files.



Displays a dialog box for adding an HTML file.



Type in a string and press the ENTER key to filter the displayed items. Only items containing the string and their corresponding parent items (only in trees) are displayed. The count of filtered items and the total count of items is provided. An

active filter is indicated by . Enclose strings with double quotes to find them exactly, for example "Camera 1" exactly filters the cameras with this name, not camera 201.

To cancel filtering, delete the string in the filter field.

18.1 Resource Manager dialog box

Main window >  **Maps and Structure** > 
or

Main window >  **Maps and Structure** >  > **Manage...**

Allows you to manage resource files.

You can manage the following file formats:

- DWF files (map resource files)
For use in Operator Client, these files are converted to a bitmap format.
- HTML files (HTML documents, e.g. action plans)
- MP3 (audio file)
- TXT files (text files)
- URL files (contain links to Web pages)
- MHT files (Web archives)
- WAV (audio file)



Click to display a dialog box for importing a resource file.



Click to display the **Add URL** dialog box.



Click to remove the selected resource file.



Click to rename the selected resource file.



Click to display a dialog box for replacing the selected resource file with another one.



Click to display a dialog box for exporting the selected resource file.

18.2 Select Resource dialog box

Main window >  **Maps and Structure** > 

Allows you to add a map file in DWF format to the Logical Tree.

Select a resource file:

Click a filename to select a map file. The content of the selected file is displayed in the preview pane.

Manage...

Click to display the **Resource Manager** dialog box.

18.3 Sequence Builder dialog box

Main window >  **Maps and Structure** > 

Allows you to manage camera sequences.



Click to display the **Add Sequence** dialog box.



Click to rename a camera sequence.



Click to remove the selected camera sequence.

Add Step

Click to display the **Add Sequence Step** dialog box.

Remove Step

Click to remove selected steps.

Step

Displays the number of the step. All cameras of a particular step have the same dwell time.

Dwell

Allows you to change the dwell time (seconds).

Camera Number

Click a cell to select a camera via its logical number.

Camera

Click a cell to select a camera via its name.

Camera Function

Click a cell to change the function of the camera in this row.

Data

Type the time for the duration of the selected camera function. To configure this, you must have selected an entry in the **Camera** column and an entry in the **Camera Function** column.

Data Unit

Select the unit for the selected time, for example seconds. To configure this, you must have selected an entry in the **Camera** column and an entry in the **Camera Function** column.

Add to Logical Tree

Click to add the selected camera sequence to the Logical Tree and to close the dialog box.

18.4

Add Sequence dialog box



Main window >

Maps and Structure >



> **Sequence Builder** dialog box >



Allows you to configure the properties of a camera sequence.

Sequence name:

Type an appropriate name for the new camera sequence.

Logical number:

For using with a CCTV keyboard, enter a logical number for the sequence.

Dwell time:

Enter the appropriate dwell time.

Cameras per step:

Enter the number of cameras in each step.

Steps:

Enter the appropriate number of steps.

18.5 Add Sequence Step dialog box



Main window >

Maps and Structure >



> **Add Step** button

Allows you to add a step with a new dwell time to an existing camera sequence.

Dwell time:

Enter the appropriate dwell time.

18.6 Add URL dialog box



Main window >

Maps and Structure >



Allows you to add an Internet address (URL) to your system. You can add this Internet address to the Logical Tree as a document. The user can display an Internet page in his Operator Client.

Name:

Type a display name for the URL.

URL:


Type the URL.

18.7 Select Map for Link dialog box



Main window >

Maps and Structure >

Select a map folder  in the Logical Tree >

On the map, right-click and click **Create Link**

Allows you to select a map for creating a link to another map.

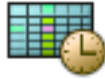


Click another map to select.

Select

Click to insert the link to the selected map.

19 Schedules page



Main window >

Allows you to configure Recording Schedules and Task Schedules.



Click to rename the selected Recording or Task Schedule.

Recording Schedules

Displays the Recording Schedules Tree. Select an entry for configuring.

Task Schedules

Displays the Task Schedules Tree. Select an entry for configuring.

Add

Click to add a new Task Schedule.

Delete

Click to delete the selected Task Schedule.

19.1 Recording Schedules page



Main window >

> Select an item in the Recording Schedules tree

Allows you to configure Recording Schedules.

Weekdays

Click to display the Schedule Table for weekdays. The time periods of all configured Recording Schedules are displayed.

Drag the pointer to select the time periods for the selected schedule. All selected cells get the color of the selected schedule.

The 24 hours of the day are displayed horizontally. Every hour is divided into 4 cells. One cell represents 15 minutes.

Holidays

Click to display the Schedule Table for holidays.

Exception Days

Click to display the Schedule Table for exception days.

Add

Click to display a dialog box for adding the required holidays or exception days.

Delete

Click to display a dialog box for removing holidays or exception days.

19.2 Task Schedules page



Main window >

> Select an item in the Task Schedules tree

Allows you to configure the available Task Schedules. You can configure a standard or a recurring pattern.

Standard

Click to display the Schedule Table for configuring standard Task Schedules. If you configure a Standard Pattern, no Recurring Pattern is valid for the selected schedule.

Recurring

Click to display the Schedule Table for configuring a recurring pattern for the selected Task Schedule. For example, you configure a schedule for every second Tuesday of every month or for the 4th of July of every year. If you configure a recurring pattern, no standard pattern is valid for the selected Task Schedule.

Weekdays

Click to display the Schedule Table for weekdays.

Drag the pointer to select the time periods for the selected schedule. The selected cells are displayed in the color of the selected schedule.

The 24 hours of the day are displayed horizontally. Every hour is divided into 4 cells. One cell represents 15 minutes.

Holidays

Click to display the Schedule Table for holidays.

Exception Days

Click to display the Schedule Table for exception days.

Clear All

Click to clear the time periods of all available days (weekdays, holidays, exception days).

Select All

Click to select the time periods of all available days (weekdays, holidays, exception days).

Add...

Click to display a dialog box for adding the required holidays or exception days.

Delete...

Click to display a dialog box for deleting holidays or exception days.

Recurrence Pattern

Click the frequency with which you want the Task Schedule to recur (Daily, Weekly, Monthly, Yearly) and then select the corresponding options.

Day Pattern

Drag the pointer to select the time period(s) for the recurring pattern.

20 Cameras and Recording page



Main window > **Cameras and Recording**

Displays the Camera Table page or a Recording Table page.

Allows you to configure camera properties and recording settings.

Allows you to filter the cameras that are displayed according to their type.



Click to copy recording settings from one Recording Schedule to another.



Click to display the **Stream Quality Settings** dialog box.



Click to display the **Scheduled Recording Settings** dialog box.



Click to display the dialog box for configuring a selected PTZ camera.



Displays all available cameras regardless of their storage device.




Click to filter the displayed cameras according to their storage device.



Displays the corresponding Camera Table. No recording settings are available because these cameras are not recorded in Bosch Video Management System.



Type in a string and press the ENTER key to filter the displayed items. Only items containing the string and their corresponding parent items (only in trees) are displayed. The count of filtered items and the total count of items is provided. An active filter is indicated by . Enclose strings with double quotes to find them exactly, for example "Camera 1" exactly filters the cameras with this name, not camera 201. To cancel filtering, delete the string in the filter field.

20.1 Cameras page



Main window > **Cameras and Recording** > Click a recording device, for example



Displays various information on the cameras available in your Bosch Video Management System.

Allows you to change the following camera properties:

- Camera name
- Assignment of an audio source
- Logical number
- PTZ control, if available
- Live quality (VRM and Live / Local Storage)
- Recording settings profile
- Minimum and maximum storage time
- ▶ Click a column title to sort the table by this column.

Encoder

Displays the device type.

Device Family

Displays the type of firmware used in the encoder.

Camera

Displays the name of the camera.

Network Address

Displays the IP address of the camera.

Location

Displays the location of the camera. If the camera is not assigned to a location yet, **Unassigned Location** is displayed.

Number

Click a cell to edit the logical number that the camera received automatically when it was detected. If you enter an already used number, a corresponding error message is displayed. The logical number is "free" again when the camera is removed.

Audio

Click a cell to assign an audio source to the camera.

If an alarm occurs with low priority and with a camera that has audio configured, this audio signal is played even when an alarm with higher priority is currently being displayed. But this is only true, if the high priority alarm has no audio configured.

Stream 1 - Codec / Stream 2 - Codec (only VRM and Local Storage)

Click a cell to select the desired codec for encoding the stream.

The following entries are available:

- MPEG-4 SH++ (only for encoders that do not support H.264)
Classic codec for MPEG-4 encoding.
- H.264 BP+ (only for VIPX and ARM)
Codec for H.264 encoding with the Baseline+ Profile optimized for low bit rates. Use for live viewing with VIPX.
Note: If live video is to be displayed on a VIPX Decoder, select **H.264 BP+**.
- H.264 MP (only for VIPX)
Codec for H.264 encoding with the Main Profile optimized for efficient encoding. Use for recording.
- H.264 MP Low Latency (only for ARM)
Codec for H.264 encoding with the Main Profile optimized for low bit rates and efficient encoding. Use for live viewing and recording.
For ARM: Use H.264 MP Low Latency for both live viewing and for recording.

Stream 1 - Quality / Stream 2 - Quality

Select the desired quality of the stream used for live or recording. You configure quality settings in the **Stream Quality Settings** dialog box.


Live Video (only VRM and Live Only / Local Storage)

Click a cell to select the stream for a VRM or a local storage / live only encoder.

Recording (only VRM and Local Storage)

Click a cell to select the required recording setting. You configure the available recording settings in the **Scheduled Recording Settings** dialog box.




(Only visible when you click  **All**)


Select a check box to activate PTZ control.

Note:


For port settings refer to *COM1, 143*.

Port (Only visible when you click  All)

Click a cell to specify which encoder serial port is used for PTZ control. For a PTZ camera connected to a Bosch Allegiant system, you can select **Allegiant**. For such a camera you do not need to use a trunk line.

Protocol (Only visible when you click  All)

Click a cell to select the appropriate protocol for the PTZ control.

PTZ Address (Only visible when you click  All)

Type the address number for the PTZ control.

Storage Min Time [days] (only VRM and Local Storage)

Click a cell to edit the minimum number of days that video data from this camera is retained. Recordings younger than this number of days are not deleted automatically.

Storage Max Time [days] (only VRM and Local Storage)

Click a cell to edit the maximum number of days that video data from this camera is retained. Only recordings older than this number of days are deleted automatically.

20.2**Scheduled Recording Settings dialog box (only VRM and Local Storage)**

Main window >  **Cameras and Recording** > 

Allows you to configure schedule-dependent recording settings for each available device family. A device family is available when at least one encoder of this device family has been added to the Device Tree. In the **Cameras** table, you assign such a recording setting to each camera. You use the Recording Schedules configured on the **Schedules** page.

Note: Switching on or off the normal recording is valid for all device families.

Available Recording Settings

Select a pre-defined recording setting to change its properties. You can add or delete a user-defined setting.

Name:

Type in a name for the new recording setting.



Select the desired device family to configure the recording settings valid for this device family.



For the selected device family, select a Recording Schedule to configure the recording settings.

Recording:

Switch on or off the normal recording (continuous and prealarm).

Recording Mode

Select the desired recording mode.

The following items are available:

- **Continuous**

– Prealarm

Stream:

Select the desired stream used for normal recording.

Note: It depends on the device family which streams are available.

Quality:

Select the desired stream quality used for normal recording. The available quality settings are configured in the **Stream Quality Settings** dialog box.

Duration

Enter the desired recording time before an alarm. You enter the time in the format hh.mm.ss.

Note: Only enabled when **Prealarm** is selected.

Alarm Recording:

Allows you to switch on or off the alarm recording for this camera.

Motion Alarm:

Allows you to switch on or off alarm recording triggered by motion.

Stream:

Select the stream used for alarm recording.

Note: It depends on the device family which streams are available.

Quality:

Select the desired stream quality used for alarm recording. The available quality settings are configured in the **Stream Quality Settings** dialog box.

Only for ARM: When you select the **No modification** entry, alarm recording uses the same quality as used for continuous/prealarm recording. We recommend using the **No modification** entry. When you select a stream quality for alarm recording, only the values for image encoding interval and target bit rate are modified according to the settings in this stream quality. The other quality settings are used that are configured in the quality setting assigned to the continuous/prealarm recording.

Duration

Enter the desired alarm recording time. You enter the time in the format hh.mm.ss.

20.3

Recording settings pages (NVR only)

Main window >  **Cameras and Recording** >  > Click a Recording Schedule tab

(for example )

Allows you to configure the recording settings for all encoders assigned to your system's NVR.


The displayed Recording Schedules are configured in **Schedules**.

Only those columns are described that are not part of a Camera Table.

- ▶ Click a column title to sort the table by this column.


Continuous Recording

In the **Quality** column, click a cell to disable recording or to select the stream quality of stream 1.

In the  column, select a check box to activate audio.


Live/Pre-event Recording

In the **Quality** column, click a cell to select the stream quality of the live view (required for instant playback) and the pre-event recording (required for motion and alarm recording) mode of stream 2. If dual streaming is active on this encoder, you can select stream 1 to use for live or pre-event recording.

In the  column, select a check box to activate audio.

Motion Recording

In the **Quality** column, click a cell to disable recording or to select the stream quality of stream 1.

In the  column, click a cell to activate audio.


In the **Pre-event [s]** column, click a cell to select the recording time before the motion event in seconds.

In the **Post-event [s]** column, click a cell to select the recording time after the motion event in seconds.

Alarm Recording

In the **Quality** column, click a cell to select the stream quality of stream 1.

To enable alarm recording, configure a corresponding alarm.

In the  column, select a check box to activate audio.

In the **Pre-event [s]** column, click a cell to select the time before the alarm in seconds.

In the **Post-event [s]** column, click a cell to select the time after the alarm in seconds.

20.4**Stream Quality Settings dialog box**

Main window > **Cameras and Recording** >

Allows you to configure stream quality profiles that you can later assign to the recording modes.

A stream quality combines video resolution, frame rate, maximum bandwidth, and video compression.



Click to add a new stream quality.



Click to delete a selected stream quality. You cannot delete the default recording settings.

Name:

Displays the name of the stream quality. When you add a new stream quality, you can change the name.

SD video resolution:

Select the desired video resolution. For an HD quality you configure the SD quality of stream 2.

Image encoding interval:

Move the slider or type the appropriate value.

The system calculates the corresponding values for IPS (PAL and NTSC).

With the image encoding interval you configure the interval at which images are encoded and transmitted. If 1 is entered, all images are encoded. Entering 4 means that only every fourth image is encoded, the following three images are skipped - this can be particularly advantageous with low bandwidths. The lower the bandwidth the higher this value should be to achieve best-quality video.

Target bit rate [Kbps]:

Move the slider or type the appropriate value.

You can limit the data rate for the encoder to optimize usage of bandwidth in your network. The target data rate should be set according to the desired picture quality for typical scenes with no excessive motion.

For complex images or frequent changes of image content due to frequent movements, this limit can be temporarily exceeded up to the value you enter in the **Maximum bit rate [Kbps]:** field.

Maximum bit rate [Kbps]:

Move the slider or type the appropriate value.

With the maximum bit rate you configure the maximum transmission speed which cannot be exceeded.

You set a bit rate limit to be able to reliably determine the appropriate disk space for storage of the video data.

Depending on the video quality settings for the I- and P-Frames, this fact can result in individual images being skipped.

The value entered here must be at least 10% higher than the value entered in the **Target bit rate [Kbps]:** field. If the value entered here is too low, it will automatically be adjusted.

I-Frame Distance

This parameter allows you to set the intervals in which the I-Frames are coded. Click

Automatic, to insert I-Frames as necessary. An entry of 1 indicates that I-Frames are continuously generated. An entry of 2 indicates that only every second image is an I-Frame, and 3 only every third image etc. The I-Frames in between are coded as P-Frames.

Frame Quality Level

Here you can set a value between 0 and 100 for both the I-Frames and the P-Frames. The lowest value results in the highest quality and the lowest frame refresh rate. The highest value results in the highest frame refresh rate and the lowest image quality.

The lower the available transmission bandwidth, the higher adjust the quality level to maintain high quality of the video.

Note:

You adjust the video quality dependent on the motion and level of detail in the video. If you check the **Automatic** check boxes, the optimum relationship between motion and image definition is automatically adjusted.




VIP X1600 XFM4 Settings

Allows you to configure the following H.264 settings for the VIP X 1600 XFM4 encoder module.

H.264 deblocking filter: Select to improve visual quality and prediction performance by smoothing the sharp edges.

CABAC: Select to activate high efficient compression. Uses a large amount of processing power.

20.5 PTZ Settings dialog box


 Main window > **Cameras and Recording** >  > Select a PTZ camera > 
 Allows you to configure a PTZ camera.

Note:

First configure the port settings of your PTZ camera before you can configure the PTZ camera settings. Otherwise the PTZ control is not working in this dialog box.

You set predefined positions and auxiliary commands.



Click to move the camera to the predefined position or to execute the command.



Click to save the predefined position or command.



Click to rename the predefined position or command.



Click to remove the predefined position or command.

Predefined Positions tab

Click to display the table with the predefined positions.

Nr

Displays the number of the predefined position.

Name

Click a cell to edit the name of the predefined position.

Aux Commands tab

Click to display the table with the auxiliary commands.

Nr

Displays the number of the auxiliary command.

Name

Click a cell to edit the name of the command.

Code

Click a cell to edit the command's code.

21 Events page




Main window > **Events**

Displays the Event Tree with all available events and an Event Configuration Table for each event. The events are grouped by their type, for example, all camera recording events like continuous recording or alarm recording are grouped under Recording Mode.

The available events are grouped beyond their corresponding devices. A state change of a

device is displayed beyond  as . All other events are displayed under device

dependant groups as .

You can configure for each event:

- Trigger an alarm according to a schedule (not available for all events)
- Log the event according to a schedule. An event is displayed in the Event List of the Operator Client if it is logged.
- Execute a Command Script according to a schedule (not available for all events)

If the event occurs, your settings are executed.

You can create a Compound Event which combines several events with Boolean expressions.

- ▶ Click a tree item to display the corresponding Event Configuration Table.



Click to duplicate an event. Use it to generate multiple alarms for a certain event.



Click to delete a duplicated or a Compound Event.



Click to rename the selected Compound Event.



Click to display a dialog box for creating Compound Events using Boolean expressions of other events (maximum 10).

Compound Events are added to the Event Configuration Table.




Click to edit the selected Compound Event.



Click to display a dialog box for creating and editing Command Scripts.



Type in a string and press the ENTER key to filter the displayed items. Only items containing the string and their corresponding parent items (only in trees) are displayed. The count of filtered items and the total count of items is provided. An

active filter is indicated by . Enclose strings with double quotes to find them exactly, for example "Camera 1" exactly filters the cameras with this name, not camera 201.

To cancel filtering, delete the string in the filter field.

Debounce Settings tab

Note: For some events the Debounce Settings tab is not available due to technical limitations. Allows you to configure debounce settings for the selected event.

Debounce Time:

During the entered time period all further events are ignored.

Event State Priority:

For an event state you can assign a priority setting.

Edit Priorities

Click to display a dialog box for configuring a priority setting.

Add Setting

Click to add a row for configuring a debounce setting that is deviating from the debounce settings for all devices.

Remove Setting

Click to remove a selected row. To select a row click the left row header.

Settings tab**Device**

Displays the name of the device or schedule.

Network

Displays the IP address of the corresponding IP device.

Trigger Alarm

Click a cell to select a Recording or Task Schedule for triggering an alarm.

Select **Always** if you want the alarm to be triggered independently from the point in time.

Select **Never** if you do not want the alarm to be triggered.

Log

In the **Schedule** column, click a cell to select a Recording or Task Schedule for logging.

Select **Always** if you want the event to be logged independently from the point in time.

Select **Never** if you do not want the event to be logged.

Script

In the **Script** column, click a cell to select a Command Script.


In the **Schedule** column, click a cell to select a Recording or Task Schedule for executing a Command Script.

Select **Always** if you want the Command Script to be executed independently from the point in time.

Select **Never** if you do not want the Command Script to be executed.

21.1

Command Script Editor dialog box

Main window >  **Events** > 
Allows you to create and edit Command Scripts.



Click to save the changed settings.



Click to restore the saved settings.



Click to check the code of a script.



Click to create a scriptlet file.



Click to delete a scriptlet file.



Click to display a dialog box for importing a script file.



Click to display a dialog box for exporting a script file.



Click to convert an existing script to the other available script language. All existing script text is deleted.



Click to display the Online Help for Bosch Video Management System Script API.



Click to display the Online Help for Bosch Video Management System.



Click to close the **Command Script Editor** dialog box.

21.2

Create Compound Event / Edit Compound Event dialog box




Main window >

Events >

Allows you to create or modify a Compound Event.



Type in a string and press the ENTER key to filter the displayed items. Only items containing the string and their corresponding parent items (only in trees) are displayed. The count of filtered items and the total count of items is provided. An

active filter is indicated by . Enclose strings with double quotes to find them exactly, for example "Camera 1" exactly filters the cameras with this name, not camera 201.

To cancel filtering, delete the string in the filter field.

Event name:

Type the required name for the Compound Event.

Event States:

Select the state change that shall be part of a Compound Event.

Objects:

Select one or more of the available objects of the selected event state. This state and the selected object appear in the Compound Event Tree, as immediate child of the root operator.

Compound Event:

Allows you to build compound events in the Compound Event Tree. All immediate children of a Boolean operator (AND, OR) are combined by this operator.

21.3

Select Script Language dialog box



Main window >

Events >

Allows you to set the script language for your Command Scripts.

You cannot change the script language for existing Command Scripts.

Script Language:

Select the required script language.

21.4 Edit Priorities of Event Type dialog box



Main window > **Events** > **Debounce Settings** tab > **Edit Priorities** button

Name of Priority:

Type in a name for the priority setting.

State Value

Displays the names of the event states of the select event.

State Priority

Enter the desired priority. 1=highest priority, 10=lowest priority.

21.5 Select Devices dialog box

Select

Select the check box for the desired entry and click **OK** to add a row in the **Devices with Deviating Debounce Settings** table.

22

Alarms page



Main window > **Alarms**

Displays the Event Tree and an Alarm Configuration Table for each event. Only the events configured on the **Events** page are displayed.

In the tables you configure for each event how an alarm triggered by this event is displayed and which cameras are recorded and displayed when this alarm occurs.

Some events are configured as alarms per default, e.g., a system error.

For the following events you cannot configure an alarm:

- Change of a recording mode
- Change of an alarm state
- Most of the user actions, e.g. PTZ action



Click to display the **Resource Manager** dialog box.



Displays a dialog box to set alarm settings valid for this Management Server.



Type in a string and press the ENTER key to filter the displayed items. Only items containing the string and their corresponding parent items (only in trees) are displayed. The count of filtered items and the total count of items is provided. An

active filter is indicated by . Enclose strings with double quotes to find them exactly, for example "Camera 1" exactly filters the cameras with this name, not camera 201.

To cancel filtering, delete the string in the filter field.

- ▶ Click a tree item to display the corresponding Alarm Configuration Table.

Device

Displays the device of the event condition selected in the Events Tree.

Network Address

Displays the IP address of the corresponding IP device.

Alarm Identity

In the **Priority** column, click in a cell to type the alarm priority for the selected alarm (**100** is low priority, **1** is high priority). In the **Title** column, click in a cell to type the title of the alarm to be displayed in Bosch Video Management System, for example in the Alarm List. In the **Color** column, click in a cell to display a dialog box for selecting a color for the alarm to be displayed in the Operator Client, for example in the Alarm List.

Alarm Image Panes

In one of the **1-5** columns, click ... in a cell to display a dialog box for selecting a camera. You can only select a camera that was added to the Logical Tree in **Maps and Structure**. You can configure the number of available Alarm Image panes in the **Alarm Settings** dialog box. In the **Audio File** column, click ... in a cell to display a dialog box for selecting an audio file that is played in case of an alarm.

Alarm Options

Click ... in a cell to display the **Alarm Options** dialog box.

22.1 Alarm Settings dialog box

Main window >  **Alarms** > 

Alarm Settings tab

Max. Image panes per alarm:

Enter the maximum count of Alarm Image panes to be displayed in case of an alarm.

Auto-clear time:

Enter the number of seconds until an alarm is automatically cleared.

This only applies for alarms that are set to **Auto-clear** in the **Alarms** page.

Manual alarm recording time:

Only valid for NVR recordings.

Enter the number of minutes for the duration of alarm recording that a user can start manually in the Operator Client.

The user can stop the manual recording before this time is elapsed.

Analog Monitor Groups tab




Show blank screen

Click to configure that on a monitor not being used for alarm display nothing is shown.

Continue live display

Click to configure that on a monitor not being used for alarm display live display is shown.

22.2 Select Image Pane Content dialog box

Main window >  **Alarms** >  or  > **Alarm Image Panes** column > Click ... in one of the **1-5** columns
Allows you to select the Logical tree item that is displayed and recorded (if the item is a camera) in case of the selected alarm.



Notice!

A map displayed in an Alarm Image pane is optimized for display and contains only the initial view of the basic .dwf file.

Search Item

Enter text to find an item in the Logical Tree.

Find

Click to find the camera with the entered search text in its description.

Live

Click to determine that the live image of the camera is displayed in case of an alarm.

Instant playback

Click to determine that instant playback of the camera is displayed.

The rewind time for instant playback is configured in the **Alarm Settings** dialog box, see *Alarm Settings dialog box*, 168.

Pause playback

Select the check box to display the alarm instant playback camera with paused instant playback. The user can start instant playback if needed.

Record this camera

Select the check box to enable alarm recording for this camera in case of an alarm. If an alarm is triggered, this camera is recorded in alarm recording quality. The duration of the recording is the duration of the alarm state plus pre- and post-alarm time. This setting directly changes the setting for alarm recording in the **Alarm Options** dialog box and vice versa.

22.3

Select Resource dialog box



Main window >

Alarms >



or



> **Alarm Image Panes** column > **Audio File** column > Click ...

Allows you to select an audio file that is played in case of an alarm.

Play

Click to play the selected audio file.

Pause

Click to pause the selected audio file.

Stop

Click to stop the selected audio file.

Manage...

Click to display the **Resource Manager** dialog box.

22.4

Alarm Options dialog box



Main window >

Alarms >



or



> **Alarm Options** column > ...

Allows you to configure the following settings for alarms:

- Cameras that start recording in case of an alarm
- Enabling protection for these alarm recordings (only for NVR recording)
- Triggering PTZ commands in case of alarm
- Notifications that are sent in case of an alarm
- Workflow that has to be processed in case of an alarm
- Assigning cameras that are displayed in analog monitor groups in case of an alarm.

Cameras tab

Nr

Displays the camera number as configured on the **Cameras and Recording** page.

Name

Displays the camera name as configured on the **Cameras and Recording** page.

Location

Displays the location as configured on the **Maps and Structure** page.

Record

Select a check box to enable alarm recording for this camera in case of an alarm. If an alarm is triggered, this camera is recorded in alarm recording quality. The duration of the recording is the duration of the alarm state plus pre- and post-alarm time. This setting directly changes the setting for alarm recording in the **Select Image Pane Content** dialog box and vice versa.

Protect Recording (only for NVR recording)

Select a check box to protect the alarm recording of this camera.

Auxiliary Command

Click a cell to select an auxiliary command to be executed in case of an alarm.
Entries in this list are only available for a PTZ camera.

Predefined Position

Click a cell to select a predefined position to be set in case of an alarm.
Entries in this list are only available for a PTZ camera.

Notifications tab**E-mail**

Select the check box to send an e-mail in case of an alarm.

Server:

Select an e-mail server.

Recipients:

Type the e-mail addresses of the recipients (example: name@provider.com).

SMS

Select the check box to send an SMS in case of an alarm.

Device:

Select an SMS device.

Recipients:

Type the mobile numbers of the recipients.

Text:

Type the text of the notification.

Information:

Select the check box to add the corresponding information to the notification text.

Workflow tab**Record only alarm**

Select the check box to specify that the camera is only recorded and not being displayed in case of this alarm. This check box is only active if the **Record** check box on the **Cameras** tab is selected.

Auto-clear alarm after configured time ('Global Alarm Options' dialog box)

Select the check box to specify that this alarm is automatically cleared.

Auto-clear alarm when event state changes back to normal

Select the check box to specify that this alarm is automatically cleared when the event that triggers this alarm changes its state. The alarm will not be cleared automatically if it is accepted and unaccepted.

Show action plan

Select the check box to enable the workflow that must be processed in case of an alarm.

Resources...

Click to display the **Resource Manager** dialog box. Select a document with a description of the corresponding workflow.

Display a comment box

Select the check box to enable displaying a comment box in case of an alarm. In this comment box the user can type comments on the alarm.

Force the operator to process the workflow

Select the check box to force the user to process the workflow. If selected, the user cannot clear the alarm until he has entered a comment on the alarm.

Execute the following Client Script when alarm is accepted:

Select a Client Command Script that is executed automatically, when the user accepts an alarm.

Analog Monitor Group tab**1...10**

In a numbered column, click a cell and select a camera from the Logical Tree. This camera will be displayed in the assigned monitor in case of an alarm.

Clear table

Click to remove all camera assignments to analog monitor groups.

Alarm title

Select the check box to configure that the title of the alarm is displayed on the analog monitors as an on-screen display.

Alarm time

Select the check box to configure that the time of the alarm is displayed on the analog monitors as an on-screen display.

Alarm date

Select the check box to configure that the date of the alarm is displayed on the analog monitors as an on-screen display.

Alarm camera name

Select the check box to configure that the name of the alarm camera is displayed on the analog monitors as an on-screen display.

Alarm camera number

Select the check box to configure that the number of the alarm camera is displayed on the analog monitors as an on-screen display.

Only on 1st monitor

Select the check box to configure that the title and the time of the alarm is displayed only on the first monitor of the analog monitor group as an on-screen display.

23

User Groups page



Main window >

User Groups

The following user group is available by default:

- Admin Group (user name: Admin)

Allows you to configure user groups, Enterprise User Groups and Enterprise Access.

User Groups tab

Click to display the pages available for configuring the rights of the standard user group.

Enterprise User Groups tab (only available with valid Enterprise license)

Click to display the pages available for configuring the permissions of an Enterprise User Group.

Enterprise Access tab (only available with valid Enterprise license)

Click to display the pages available for adding and configuring Enterprise Access.



Click to delete a selected entry.



Click to add a new group or account.



Click to add a new user to the selected user group. Change the default user name if desired.



Click to add a new dual authorization group.



Click to add a new logon pair for dual authorization.



Displays a dialog box for copying permissions from a selected user group to another user group.



Click to display the pages available for configuring the permissions of this group.



Click to display the page available for configuring the properties of this user.



Click to display the page available for configuring the properties of this logon pair.



Click to display the pages available for configuring the permissions of this dual authorization group.

Permissions on an Enterprise System

For an Enterprise System you configure the following groups of permissions:

- Operating permissions of Operator Client that the user needs for working with the devices of all configured Management Server computers, for example the user interface of the alarm monitor.
Use an Enterprise User Group. Configure it on the Enterprise Management Server.
- Device permissions valid on each Management Server.
Use Enterprise Access. Configure it on each Management Server.

Permissions on a single Management Server

For managing the access to only one Management Server, use the standard user group. You configure all permissions on this Management Server in this user group.

You can configure dual authorization user groups for standard user groups and for Enterprise User Groups. Dual authorization is not available for Enterprise Access.

Name of the user group type	Does it contain users?	Available configuration settings	Where do you configure?
User group	Yes	– Operating and device permissions	– Management Server
Enterprise User Group	Yes	– Operating permissions – Per Management Server in the server list: Name of the corresponding Enterprise Account with logon credentials	– Enterprise Management Server
Enterprise Access	No	– Device permissions – Logon credentials	– Management Server
Dual authorization user group	No	– Management Server permissions	– Management Server
Enterprise dual authorization	No	– Per Management Server: Name of the corresponding Enterprise User Group with logon credentials	– Enterprise Management Server

Table 23.1: Types of user groups



Type in a string and press the ENTER key to filter the displayed items. Only items containing the string and their corresponding parent items (only in trees) are displayed. The count of filtered items and the total count of items is provided. An

active filter is indicated by . Enclose strings with double quotes to find them exactly, for example "Camera 1" exactly filters the cameras with this name, not camera 201.

To cancel filtering, delete the string in the filter field.

23.1

Add New User Group/Account dialog box

Main window > **User Groups** > **User Groups** tab >

or

Main window > **User Groups** > Enterprise User Groups tab >

or

Main window > **User Groups** > Enterprise Access tab >

Allows you to create a standard user group, an Enterprise User Group or an Enterprise Account.

The Enterprise User Groups tab is only available if the appropriate license is available and if



one or more Management Server computers are configured in **Devices > Enterprise System > Server List**.

The Enterprise Access tab is only available, if the appropriate license is available and if devices are configured on the respective Management Server.

Name:

Type in a name for the group or account.

Description:

Type in a description for the group or account.

For Enterprise Accounts:

Enterprise Account Password:

Type in a password.

Confirm password:

Enter the new password again.

See also

- *Creating a group or account, 70*

23.2

User Group Properties page



Main window > **User Groups > User Groups tab > Operating Permissions > User Group Properties** tab
or



Main window > **User Groups > Enterprise User Groups tab > Operating Permissions > User Group Properties** tab

Allows you to configure the following settings for the selected user group:

- Logon schedule
- Association of an LDAP user group

Description:

Type an informative description for the user group.

Language:

Select the language of the Operator Client (both NVR and VRM).

Logon schedule:

Select a task or recording schedule. The users of the selected group can only log on to the system in the times defined by this schedule.

Associated LDAP group:

Type the name of the LDAP user group that you want to use for your system.

You can also double-click an item in the **LDAP Groups:** list.

LDAP Groups:

Displays the available LDAP user groups. You configure LDAP groups in the **LDAP Server Settings** dialog box.

Search for Groups

Click to display the available LDAP user groups in the **LDAP Groups:** list. To find user groups you must make the appropriate settings in the **LDAP Server Settings** dialog box.

Settings

Click to display the **LDAP Server Settings** dialog box.



Associate Group


Click to associate the selected LDAP group with this user group.

Clear Group

Click to clear the **Associated LDAP group:** field. The association of the LDAP group to the Bosch Video Management System user group is removed.

23.3**User Properties page**


 Main window > **User Groups** > **User Groups** tab > **Operating Permissions** >  > **User Properties** tab
 or


 Main window > **User Groups** > Enterprise User Groups tab > **Operating Permissions** >  > **User Properties** tab

Allows you to configure a new user in a standard user group or in an Enterprise User Group.

Full name:

Type the full name of the user.

Description:

Type an informative description for the user.

Enter new password:

Type the password for the new user.



Confirm password:

Type the new password again.



Apply

Click to apply the settings.

23.4**Add New Dual Authorization Group dialog box**


 Main window > **User Groups** > **User Groups** tab > 

 or


 Main window > **User Groups** > Enterprise User Groups tab > 

 Allows to create a dual authorization for a standard user group or for an Enterprise User Group. For Enterprise Access, a dual authorization is not available.

Name:

Type in a name for the group.


Description:

Type in description for the group.



See also

- *Creating a dual authorization group, 71*

23.5**Logon Pair Properties page**

Main window >  **User Groups** > **User Groups** tab >  **New Dual Authorization**

Group > 
or

Main window >  **User Groups** > **Enterprise User Groups** tab >  **New Enterprise**

Dual Authorization Group > 

Allows you to modify a pair of user groups to a dual authorization group. The users of the first user group are the users that must log on in the first dialog box for logging on, the users of the second user group confirm the logon.

Select Logon Pair

In each list, select a user group.



Force dual authorization

Select the check box to force each user to log on only together with a user of the second user group.

23.6**Select User Groups dialog box**

Main window >  **User Groups** > **User Groups** tab >  **New Dual Authorization**

Group > 
or

Main window >  **User Groups** > **Enterprise User Groups** tab >  **New Enterprise**

Dual Authorization Group > 

Allows you to add a pair of user groups to a dual authorization group. The users of the first user group are the users that must log on in the first dialog box for logging on, the users of the second user group confirm the logon.

Select Logon Pair

In each list, select a user group.

Force dual authorization

Select the check box to force each user to log on only together with a user of the second user group.

23.7 Camera Permissions page



Main window >
Permissions tab

or



Main window > **User Groups** > Enterprise Access tab > **Device Permissions** >
Camera Permissions tab

Allows you to configure the access rights for the features of a selected camera or camera group for the selected user group.

If new components are added, camera permissions must be configured afterwards.

You can recall the access to a camera on the **Logical Tree** page.

Camera

Displays the camera name as configured on the **Cameras and Recording** page.

Location

Displays the location of the camera as configured on the **Maps and Structure** page.

Access

Select a check box to allow access to this camera.

Live Video

Select a check box to allow using live video.

Live Audio

Select a check box to allow using live audio.

Manual Recording

Select a check box to allow manual recording (alarm recording).

You can select or clear this check box only when the manual alarm recording is enabled on the **Operator Features** page.

Playback Video

Select a check box to allow using playback video.

You can select or clear this check box only when playback is enabled on the **Operator Features** page.

Playback Audio

Select a check box to allow using playback audio.

You can select or clear this check box only when playback is enabled on the **Operator Features** page.

Metadata

Select a check box to allow displaying metadata.

You can select or clear this check box only when the display of metadata is enabled on the **Operator Features** page.

Export

Select a check box to allow exporting video data.

You can select or clear this check box only when the export of video data is enabled on the **Operator Features** page.

PTZ

Select a check box to allow using the control of this camera.

You can select or clear this check box only when the PTZ control of a camera is enabled on the **Operator Features** page.

Aux

Select a check box to allow executing auxiliary commands.

You can select or clear this check box only when the PTZ control of a camera is enabled on the **Operator Features** page.

Set Presets


Select a check box to allow the user to set prepositions of this PTZ camera.


You can select or clear this check box only when the PTZ control of a camera is enabled on the **Operator Features** page.

Reference Image

Select a check box to allow updating the reference image of this camera.

23.8**Control Priorities**

Main window >  **User Groups > User Groups tab > Device Permissions > Control Priorities** tab
or

Main window >  **User Groups > Enterprise Access tab > Device Permissions > Control Priorities** tab

Control Priorities

Move the appropriate slider to the right to decrease the priority for acquiring PTZ controls and Bosch Allegiant trunk lines. A user with a high priority can lock the PTZ controls or the control of a trunk line for users with lower priorities. You set the timeout for locking PTZ control on the **Timeout in min.** field. The default setting is 1 minute.




Timeout in min.




Enter the time period in minutes.

See also

- *Configuring various priorities, 76*

23.9**Copy User Group Permissions dialog box**

Main window >  **User Groups > User Groups tab >**  > 

Main window >  **User Groups > Enterprise User Groups tab >**  > 
Allows you to select user group permissions to be copied to selected user groups.

Copy from:

Displays the selected user group. Its permissions are to be copied to another user group.

Settings to Copy

Select a check box to select the desired user group permissions for copying.

Copy to:

Select a check box to specify the user group where to copy the selected user group permissions to.

23.10**Decoder Permissions page**

Main window > **User Groups** > **User Groups** tab > **Device Permissions** > **Decoder Permissions** tab
or



Main window > **User Groups** > Enterprise Access tab > **Device Permissions** > **Decoder Permissions** tab

Allows you to configure the decoders that the users of this group have access to.

Decoder

Displays the available decoders.

Click the check box to give the user group access to this decoder.

23.11**Events and Alarms page**

Main window > **User Groups** > **User Groups** tab > **Device Permissions** > **Events and Alarms** tab
or



Main window > **User Groups** > Enterprise Access tab > **Device Permissions** > **Events and Alarms** tab

Allows to configure the permissions for the Events Tree, i.e. you set the events the user group is authorized or not authorized to use.

For each event there is at least one device. For example, for the **Video Loss** event the available cameras are the devices. For an event like **Backup Finished** the corresponding device is **Time Controlled Backup**. Hence, a device can be a software process.

1. Expand a tree item and click the required check boxes for enabling the events. In the **Camera** column, select the check box to enable the events of all the available devices. This ensures that the user group gets events from devices that this user group has no access to. The access to the devices is configured on the **Logical Tree** page and on the **Camera Permissions** page.
2. To enable or disable all events at once, select or clear the **Events and Alarms** check box.

23.12**LDAP Server Settings dialog box**

Main window > **User Groups** > **User Groups** tab > **Device Permissions** > **User Group Properties** tab > **Settings** button
or



Main window > **User Groups** > Enterprise User Groups tab > **Device Permissions** > **User Group Properties** tab > **Settings** button

You enter the LDAP server settings that are configured outside of Bosch Video Management System. You will need the assistance of your IT administrator who set up the LDAP server for the following entries.

All fields are mandatory except the fields in the **Test User / User Group** group box.

LDAP Server Settings

LDAP Server: Port:

☐ Secure connection

LDAP basis for user:

Filter for user:

LDAP basis for group:

Filter for group member search:

Proxy User

User name (DN):

Password:

Test User / User Group

User name:

Password:

Group (DN):

Group search filter:

LDAP Server Settings

LDAP Server:

Type the name of the LDAP server.

Port:

Type the port number of the LDAP server (default unencrypted: 389, encrypted: 636)

Secure connection

Select the check box to activate encrypted data transmission.

LDAP basis for user:

Type the unique name (DN = distinguished name) of the LDAP path in which you can search for a user. Example for a DN of the LDAP

basis:CN=Users,DC=Security,DC=MyCompany,DC=com

Filter for user:

Select a filter used to search for a unique user name. Examples are predefined. Replace %username% with the actual user name.

LDAP basis for group:

Type the unique name of the LDAP path in which you can search for groups.

Example for a DN of the LDAP basis:CN=Users,DC=Security,DC=MyCompany,DC=com

Filter for group member search:

Select a filter used to search for a group member.

Examples are predefined. Replace %usernameDN% with the actual user name and his DN.

Proxy User**User name (DN):**

Type the unique name of the proxy user. This user is required to allow the users of this Bosch Video Management System user group to access the LDAP server.

Password:

Type the proxy user password.

Test

Click to test whether the proxy user has access to the LDAP server.

Test User / User Group

The entries in this group box are not saved after clicking **OK**. They only serve for testing.

User name:

Type the name of a test user. Omit the DN.

Password:

Type the test user password.

Test User

Click to test whether the combination of user name and password is correct.

Group (DN):

Type the unique group name with which the user is associated.

Test Group

Click to test the association of the user with the group.

Group search filter:

Do not leave this field empty. If there is no entry, you cannot assign an LDAP group to a Bosch Video Management System user group.

Select a filter to find a user group.

Examples are predefined.

23.13

Credentials page



Main window > **User Groups** > Enterprise Access tab > **Device Permissions** > **Credentials** tab

Configure the credentials of an Enterprise Account on a Management Server.

You configure Enterprise Access on each Management Server that is member of your Enterprise System. The Enterprise Management Server uses this credential to grant access to the devices of this Management Server for the Operator Client that logs on as a user of an Enterprise User Group.



Rename the item as desired. This is the name of the Enterprise Account.

Description:

Type in a description for this Enterprise Account.

Enter new password: / Confirm password:

Type in and confirm the password for this Management Server.

See also

- *Add New User Group/Account dialog box, 173*

23.14

Logical Tree page



Main window >

Tree tab

or

User Groups > User Groups tab > **Device Permissions > Logical**



Main window >

Tree tab

Allows you to configure the Logical Tree for each user group.

User Groups > Enterprise Access tab > **Device Permissions > Logical**

Logical Tree

Select a check box to give the users of the selected user group access to the corresponding devices.

You can recall the access to a camera on the **Camera Permissions** page.

23.15

Operator Features page



Main window >

Features tab

or

User Groups > User Groups tab > **Operating Permissions > Operator**



Main window >

Operator Features tab

Allows you to configure various permissions for the selected user group.

User Groups > Enterprise User Groups tab > **Operating Permissions**

PTZ control of dome cameras

Select the check box to allow the control of a camera.

Control Priorities page: In the **Control Priorities** field, you can set the priority for acquiring the control of a camera.

Allegiant trunk lines

Select the check box to allow accessing Bosch Allegianttrunk lines.

Control Priorities page: In the **Control Priorities** field, you can set the priority for acquiring Bosch Allegiant trunk lines.

Print and save video data

Select the check box to allow printing and saving video data.

Alarm processing

Select the check box to allow alarm processing.

Interrupt the Windows Screen Saver for incoming alarms

Select the check box to ensure that an incoming alarm is displayed even when the screen saver is active. If the screen saver requires a user name and password for being interrupted, this setting has no effect.

Alarm display

Select the check box to allow alarm display. If you select this option, the **Alarm processing** is deactivated simultaneously.

Playback

Select the check box to allow a higher priority for Playback Mode and to allow the other playback features.

If you clear this check box, the **Export video files**, **Protect and unprotect video data**, **Delete video**, and **Access to video data that has been recorded in periods when the user group has not been allowed to logon** permissions and the **Live Video** permissions for all available cameras on the **Operator Features** page are cleared and disabled.

Export video files

Select the check box to allow exporting video data.

If you clear this check box, the permissions for all available cameras on the **Operator Features** page are disabled also.

Protect and unprotect video data

Select the check box to allow protecting video data.

Delete video

Select the check box to allow deleting video data.

Access to video data that has been recorded in periods when the user group has not been allowed to logon

Select the check box to allow accessing the described video data.

Logbook access

Select the check box to allow accessing the Logbook.

Operator event buttons

Select the check box to allow user event buttons in the Operator Client.

Close Operator Client

Select the check box to allow closing the Operator Client.

Minimize Operator Client

Select the check box to allow minimizing the Operator Client.

Audio Intercom

Select the check box to allow the user to speak on the loudspeakers of an encoder with audio-in and audio-out function.

Manual Alarm Recording

Select the check box to allow manual alarm recording.

If you clear this check box, the **Metadata** permissions for all available cameras on the **Operator Features** page are cleared and disabled.

Access VRM Monitor

Select the check box to allow access to the VRM Monitor software.

Set reference image

Select the check box to allow updating the reference image in the Operator Client.

Set area selection for reference image

Select the check box to allow selecting the area in the camera image for updating the reference image in the Operator Client.

Display order in case of same alarm priority:

Select the appropriate value to configure the order of Alarm Image panes in the Alarm Display of the Operator Client.

Instant playback rewind time:

Enter the number of seconds for the duration of instant playback.

Repeat alarm audio:

Select the check box and enter the number of seconds after an alarm sound is repeated.

Limit access to recorded video to the last n minutes.

Select the check box to limit the access to recorded videos.
In the list, enter the number of minutes.

See also

- *Configuring operating permissions, 73*

23.16**Priorities page**

Main window >

Priorities tab

or



Main window >

> **Priorities** tab

User Groups > User Groups tab > Operating Permissions >

User Groups > Enterprise User Groups tab > Operating Permissions



Main window >

User Groups >



Allows you to configure the timeout for explicit PTZ locking. You can set the priorities for PTZ control and the display of incoming alarms.

Automatic Popup Behavior

Move the slider to adjust the priority value of Live Image window or Playback Image window. This value is required for incoming alarms to decide whether this alarm is automatically displayed in the Alarm Image window.

For example: If you move the slider for Live Image window to 50 and for the Playback Display to 70 and an alarm comes in with a priority of 60, the alarm is only automatically displayed if the user has Playback Display active. The alarm is not automatically displayed when the user has Live Display active.

23.17**User Interface page**

Main window >

Interface tab

or

User Groups > User Groups tab > Operating Permissions > User



Main window > **User Groups** > Enterprise User Groups tab > **Operating Permissions** > **User Interface** tab

Allows you to configure the user interface of 4 monitors used by the Operator Client.

Control Monitor

Select the control monitor which displays Live Mode only.

Alarm Monitor

Select the alarm monitor which can display either Live and Alarm Mode or only Alarm Mode.

Monitor 1 - 4

In the corresponding list, select the required entry.

Image panes aspect ratio

For each monitor select the required aspect ratio for the initial startup of Operator Client. Use 16:9 for HD cameras.

Save settings when shutting down

Select the check box to activate that the system remembers the last state of the user interface when the user logs off from the Operator Client. If the check box is not selected, the Operator Client starts always with the configured user interface.

Restore Default

Click to restore the default settings of this page.

Load Custom Layout

Click to import an XML file with user interface settings.


Unload Custom Layout

Click to display a dialog box for unloading imported interface settings.

23.18

Server Access page



Main window > **User Groups** > Enterprise User Groups tab >  > **Server Access** tab

You configure the server access on an Enterprise Management Server.

You enter the name of the Enterprise Account and its password for each Management Server of your Enterprise System. This account is configured on each Management Server.

Management Server

Displays the name of the Management Server that you configured on this Enterprise Management Server.

Network Address

Displays the IP address or DNS name of the Management Server.

Server Number

Displays the number of the Management Server. This number is used by an IntuiKey keyboard to select the desired Management Server.

Access

Click to check when you want to grant access to the Management Server.

Enterprise Account

Type in the name of the Enterprise Account that has been configured on the Management Server.

Enterprise Account Password

Type in the password of the Enterprise Account that has been configured on the Management Server.

See also

- *Adding multiple Management Server computers, 81*
- *Creating a group or account, 70*

24

Concepts

This chapter provides background information on selected issues.

24.1

Alarm handling

Alarms can be individually configured to be handled by one or more user groups. When an alarm occurs, it appears in the Alarm List of all users in the user groups configured to receive that alarm. When any one of these users starts to work on the alarm, it disappears from the Alarm List of all other users.

Alarms are displayed on a workstation's alarm monitor and optionally on analog monitors. This behavior is described in the following paragraphs.

Alarm flow

1. An alarm occurs in the system.
2. Alarm notifications appear in the Alarm Lists of all users configured for this alarm. Alarm video is immediately displayed on configured monitors. If it is an automatically displayed alarm (auto pop-up), the alarm video is also automatically displayed on the Operator Client workstation's alarm monitors.
If the alarm is configured as an auto-clear alarm, the alarm is removed from the Alarm List after the auto-clear time (configured in the Configuration Client).
On analog monitors, any quad views from VIP XDs are temporarily replaced by full-screen displays.
3. One of the users accepts the alarm. The alarm video is then displayed on this user's workstation (if it is not already displayed via auto pop-up). The alarm is removed from all other Alarm Lists and alarm video displays.
4. The user who accepted the alarm invokes a workflow that can include reading an action plan and entering comments. This step is optional - requirements for workflow can be configured by the administrator.
5. Finally, the user clears the alarm. This removes the alarm from his Alarm List and alarm display.
On an analog monitor group, the monitors return to the cameras that were displayed before the alarm occurred.

Alarm Image window

1. To display alarm video, the Alarm Image window replaces the Live or Playback Image window on the monitor that has been configured for alarm display.
2. Each alarm gets a row of Image panes. Up to 5 Image panes can be associated with each alarm. These Image panes can display live video, playback video, or maps.
On an analog monitor group, each alarm can call up cameras on a row of analog monitors. The number of cameras in the row is limited by the number of columns in the analog monitor group. Monitors in the row that are not used for alarm video can be configured to either continue with their current display or to display a blank screen.
3. Higher priority alarms are displayed above lower priority alarms on both analog monitor rows and the Operator Client workstation display alarm rows.
4. If the Alarm Image window is completely full of Alarm Image rows and an additional alarm must be displayed, the lowest priority alarms "stack up" in the bottom row of the Alarm Image window. You can step through the stacked alarms with the controls at the left side of the alarm row.
You can step through the alarm stacks on analog monitor groups with control buttons in the **Monitors** window of the Operator Client workstation display. Analog monitors in alarm are indicated by red icons with blinking "LEDs".

- The alarm title, time, and date can be optionally be displayed on all analog monitors, or only the first monitor in the alarm row.
5. For equal priority alarms, the administrator can configure the order behavior:
 - Last-in-First-out (LIFO) mode: in this configuration, new alarms are inserted *above* older alarms of the same priority.
 - First-in-First-out (FIFO) mode; in this configuration, new alarms are inserted *below* older alarms of the same priority.
 6. An alarm's Image row can appear in the Alarm Image window in one of two ways:
 - When it is generated (auto pop-up). This occurs when the alarm priority is higher than display priority.
 - When the alarm is accepted. This occurs when the alarm priority is lower than display priority.

Auto pop-up alarms

Alarms can be configured to automatically display (pop up) in the Alarm Image window, based on the alarm priority. Each user group's live and playback displays are also assigned priorities. When alarms are received with priority higher than that of the user's display, the alarm automatically displays its alarm row in the Alarm Image window. If the Alarm Image window is not currently displayed, it automatically replaces the Live or Playback Image window on the alarm-enabled monitor.

Although auto pop-up alarms are displayed in the Alarm Image window, they are not automatically accepted. They can be displayed on multiple users' displays simultaneously. When a user accepts an auto pop-up alarm, it is removed from all other users Alarm Lists and alarm displays.

24.2

Enterprise System

The target of a Bosch VMS Enterprise System is to enable a user of Operator Client to simultaneously access multiple Management Server computers.

The Management Server where you configure a list of further Management Server computers is called Enterprise Management Server. This server can additionally play the role of a normal Management Server.

See also

- *Creating an Enterprise System, 81*

24.2.1

Scenarios

The following three scenarios are covered.

- **Scenario 1:** A dedicated server plays the role of an Enterprise Management Server. This server has the only task to manage the simultaneous access of an Operator Client workstation to multiple Management Server computers.

An Operator Client workstation logs on to an Enterprise Management Server. After successful logon the user of Operator Client has access to the devices of all configured Management Server computers.

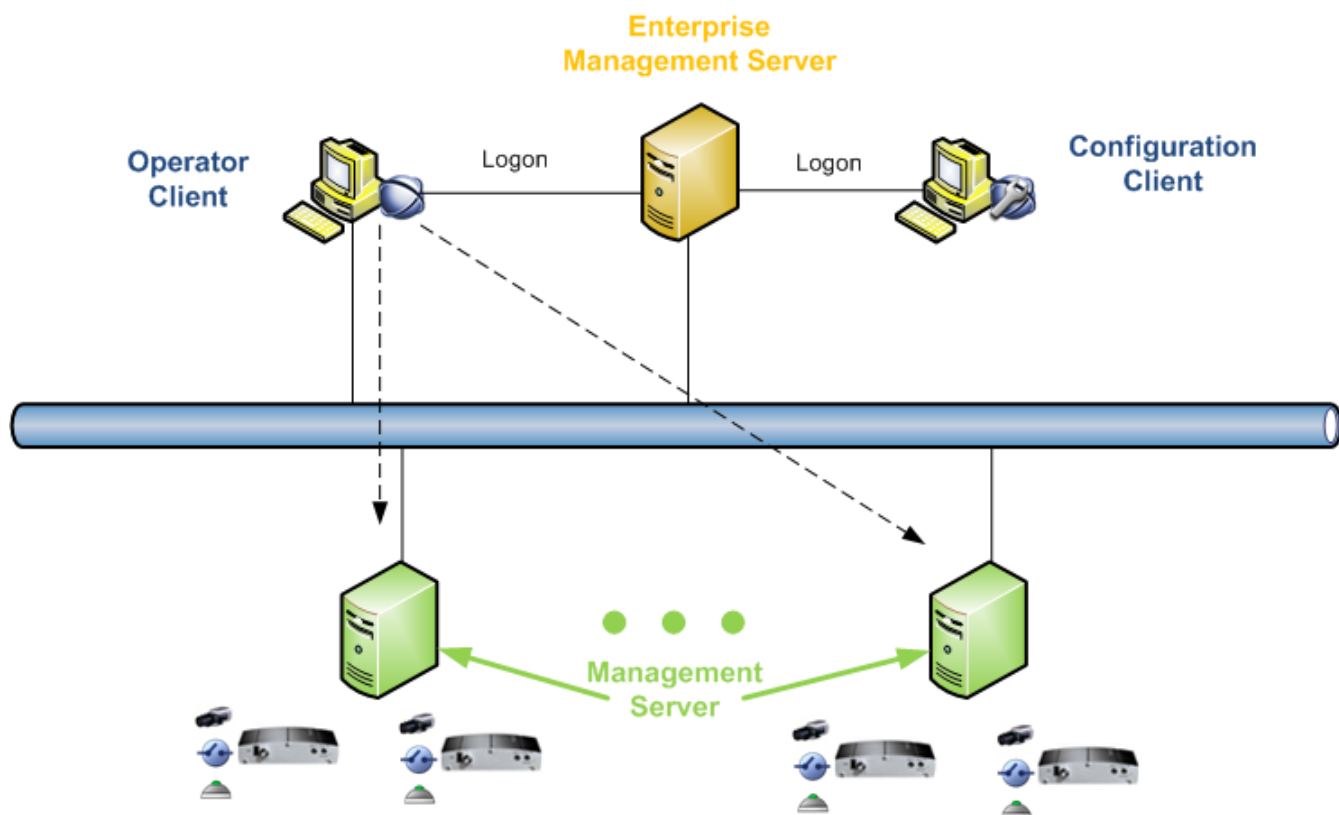


Figure 24.1: Enterprise Scenario 1

- **Scenario 2:** A Management Server computer has the additional task of an Enterprise Management Server to manage the access to all Management Server computers including itself.

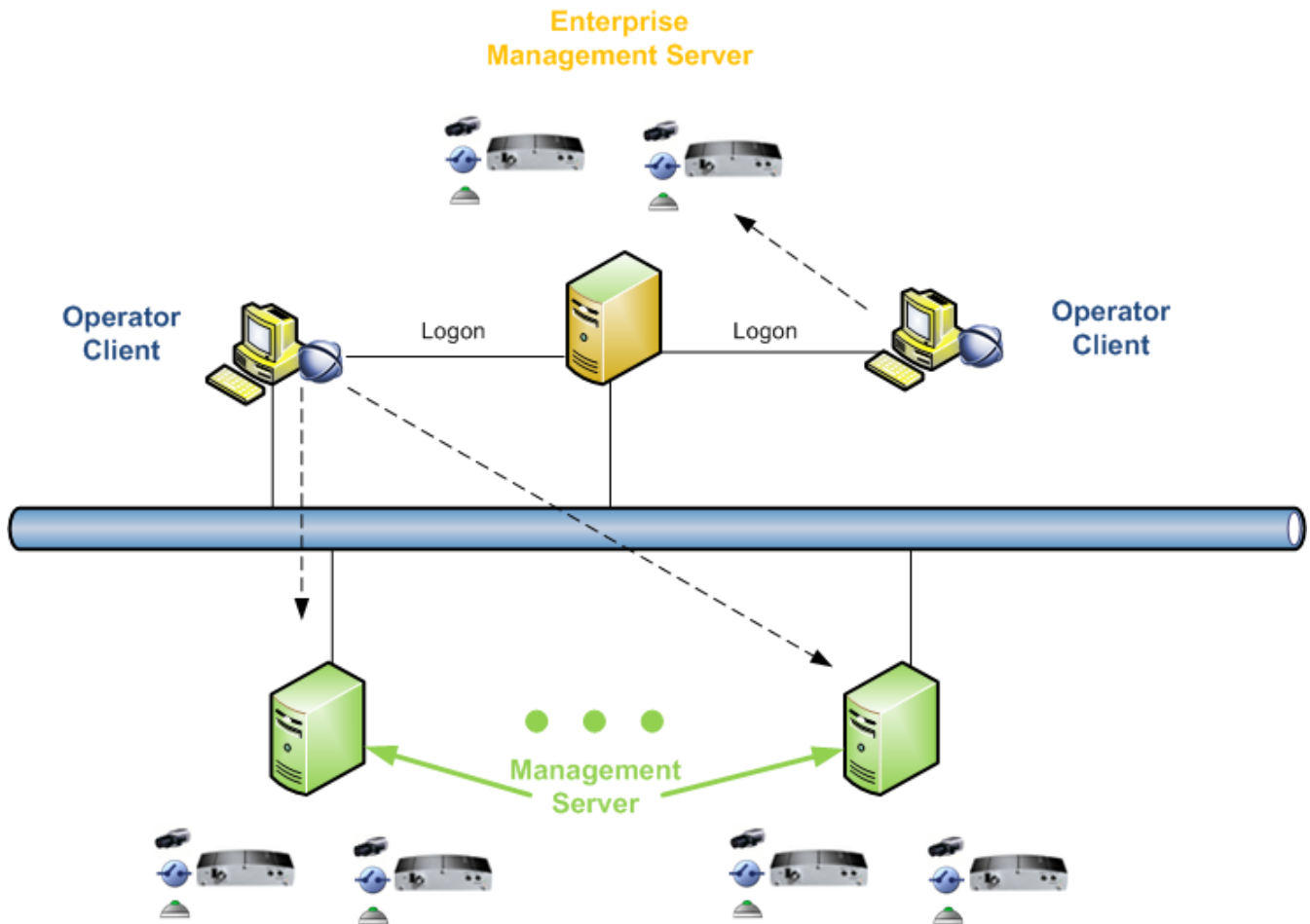


Figure 24.2: Enterprise Scenario 2

- **Scenario 3:** The classic client-server architecture remains supported.

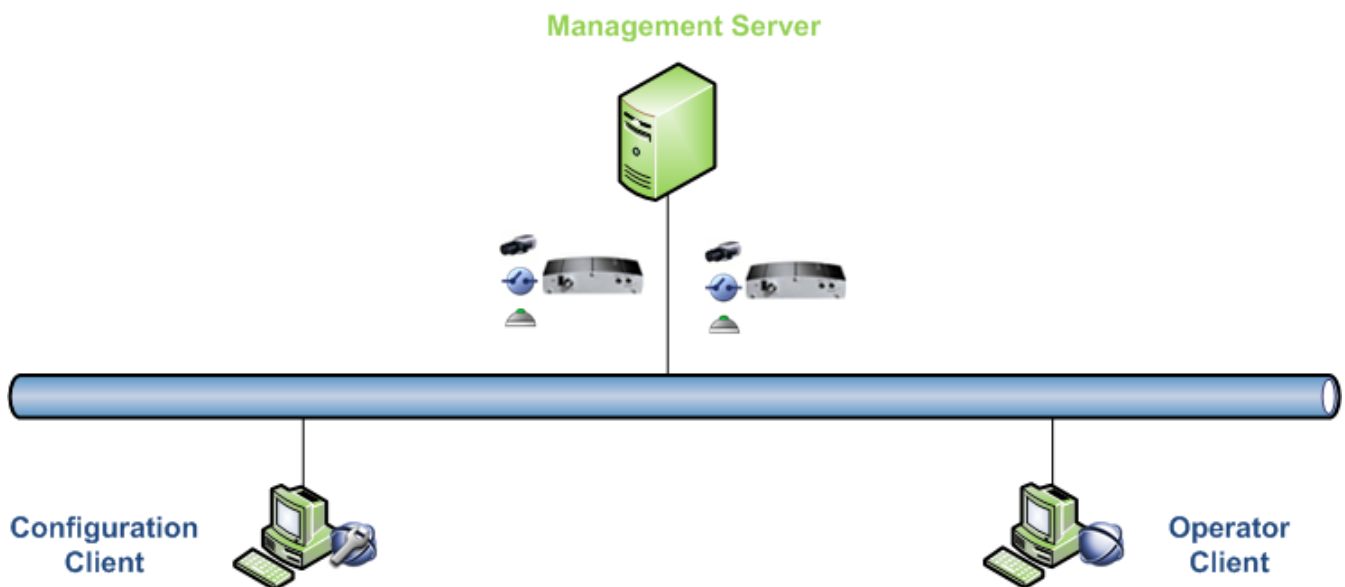


Figure 24.3: Classic Scenario 3

24.2.2 Permissions

Permissions on an Enterprise System

For an Enterprise System you configure the following groups of permissions:

- Operating permissions of Operator Client that the user needs for working with the devices of all configured Management Server computers, for example the user interface of the alarm monitor.
Use an Enterprise User Group. Configure it on the Enterprise Management Server.
- Device permissions valid on each Management Server.
Use Enterprise Access. Configure it on each Management Server.

Permissions on a single Management Server

For managing the access to only one Management Server, use the standard user group. You configure all permissions on this Management Server in this user group.

You can configure dual authorization user groups for standard user groups and for Enterprise User Groups. Dual authorization is not available for Enterprise Access.

24.2.3 Types of user groups

Name of the user group type	Does it contain users?	Available configuration settings	Where do you configure?
User group	Yes	– Operating and device permissions	– Management Server
Enterprise User Group	Yes	– Operating permissions – Per Management Server in the server list: Name of the corresponding Enterprise Account with logon credentials	– Enterprise Management Server
Enterprise Access	No	– Device permissions – Logon credentials	– Management Server
Dual authorization user group	No	– Management Server permissions	– Management Server
Enterprise dual authorization	No	– Per Management Server: Name of the corresponding Enterprise User Group with logon credentials	– Enterprise Management Server

Table 24.1: Types of user groups

24.2.4 Licensing

Bosch VMS Enterprise (MBV-BENT) version license is required at each Enterprise Management Server to enable the feature.

Per connecting Management Server planned to be a member of an Enterprise System, 1 license is required (MBV-XSUB).

To update an existing Bosch VMS license to an Enterprise System, you need an Enterprise Upgrade license (MBV-FEUP).

Per workstation the existing workstation license (MBV-XWST) is required.

24.3

Connecting Bosch Allegiant Matrix to Bosch Video Management System

The Bosch Video Management System Allegiant Matrix interface provides seamless access to analog matrix cameras in the Operator Client interface. Allegiant cameras appear almost identical to IP cameras. The only difference is a small grid symbol on the camera to indicate that it is a Allegiant camera. You can display cameras using the same tasks as for IP cameras. They are included both in the Logical Tree and the site maps, and users can add them to their Favorites Trees. In-video-window control for Allegiant-connected PTZ cameras is supported, and you can easily display Allegiant cameras on analog monitors connected to IP decoders. Bosch Video Management System provides an interface to the matrix switch via the Allegiant MCS (Master Control Software) application). The MCS, in this case, runs invisibly in the background. This software provides an efficient, event-driven interface to the Allegiant. It provides fast, real-time event response from the Allegiant to Bosch Video Management System. So, for example, if a defective coax cable results in video loss in the Allegiant, an immediate notification is sent to Bosch Video Management System. Also, you can program Bosch Video Management System to respond to Allegiant alarms.

24.3.1

Bosch Allegiant Connection Overview

To achieve a connection between Bosch Video Management System and an Allegiant matrix switching system, you configure a control channel between the Bosch Video Management System and the Allegiant matrix.

Two scenarios are possible:

- Local connection
The Management Server controls the Allegiant matrix.
- Remote connection
A dedicated Bosch Allegiant PC connected to the network controls the Allegiant matrix.

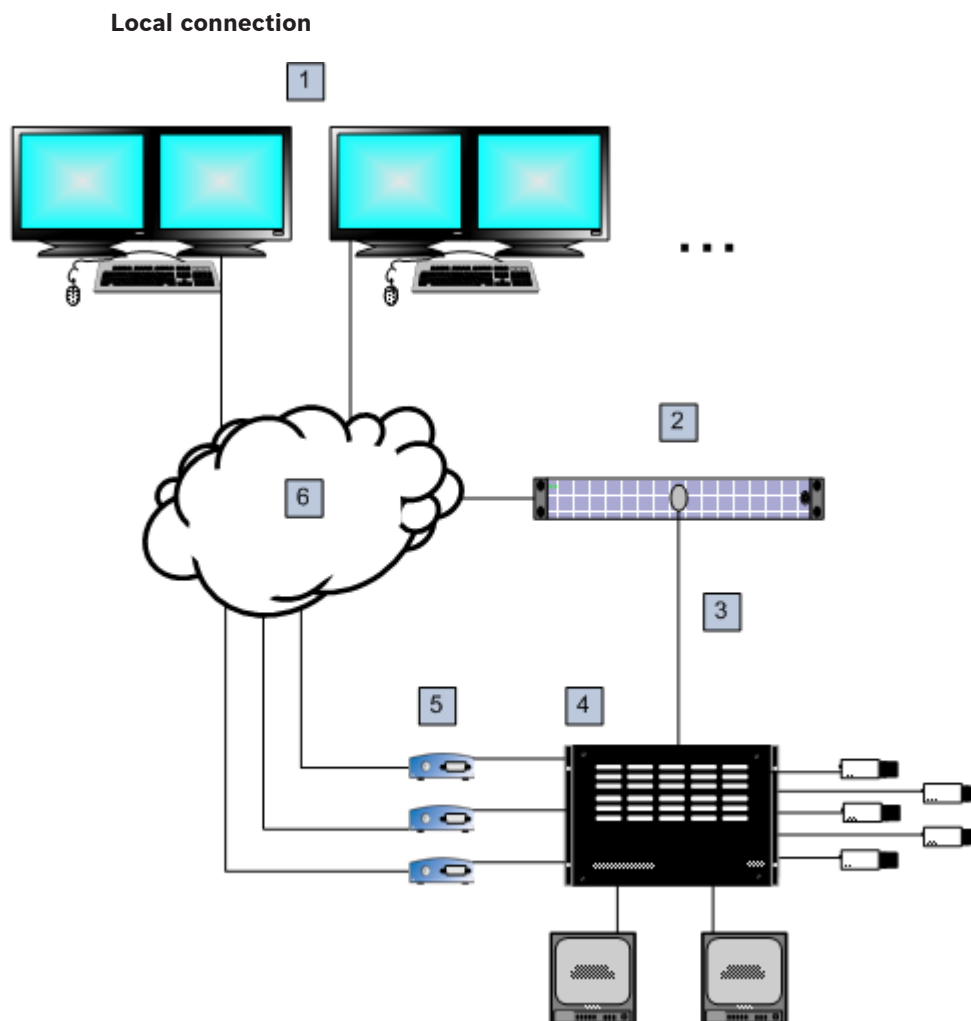


Figure 24.4: Bosch Video Management System local connection to a Bosch Allegiant matrix switch

1	Bosch Video Management System Client workstations
2	Management Server with Master Control Software
3	RS-232 connection
4	Allegiant matrix
5	encoders
6	Network

Remote connection

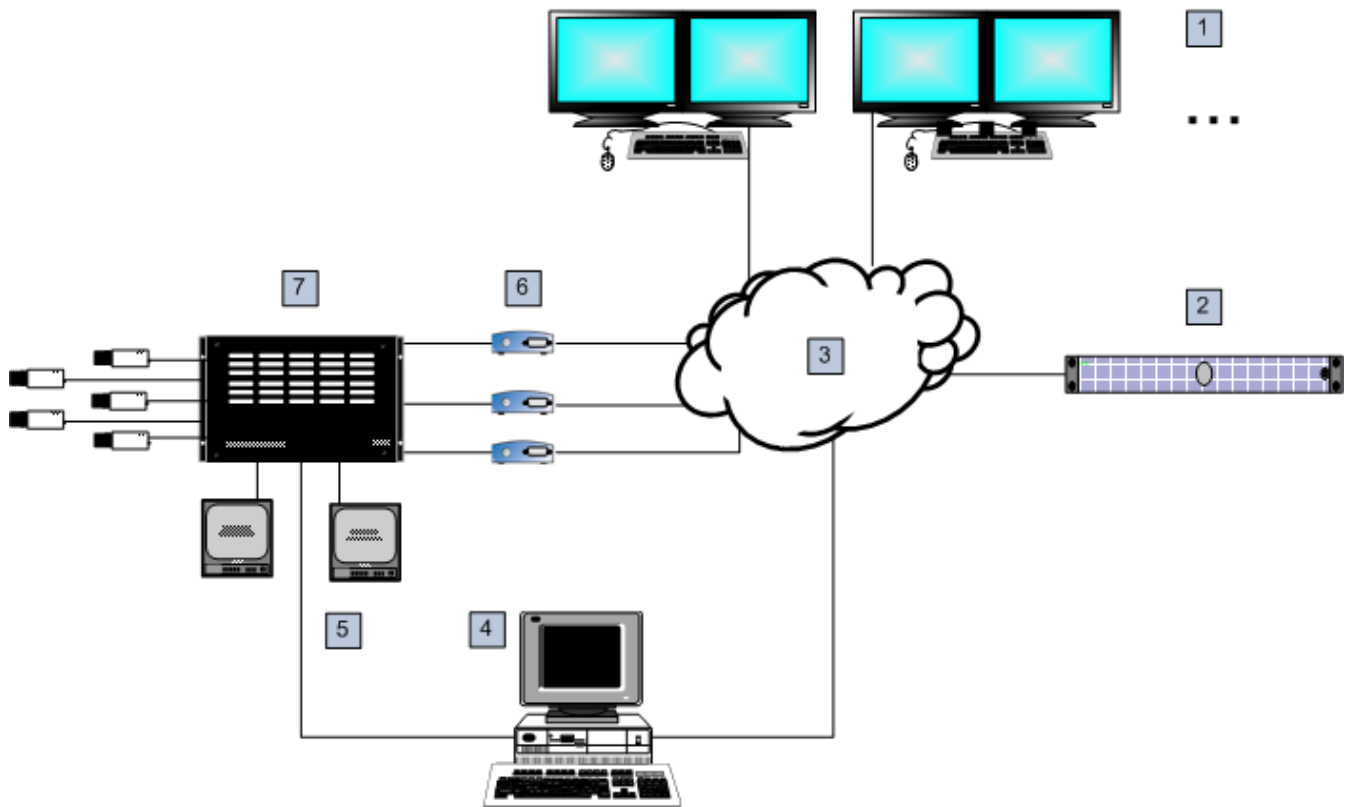


Figure 24.5: Bosch Video Management System remote connection to a Bosch Allegiant matrix switch

1	Bosch Video Management System Client workstations
2	Management Server with Master Control Software
3	Network
4	Allegiant PC with Master Control Software
5	RS-232 connection
6	encoders
7	Allegiant matrix

24.3.2

Configuring the control channel

Perform the following tasks to configure the control channel:

- Wiring
- Installing the software
- Creating Allegiant configuration file
- Adding the Allegiant matrix to Bosch Video Management System
- Configuring user names

Wiring

To configure the control channel between Bosch Video Management System and the Allegiant matrix, connect one PC through an RS-232 serial port to the Allegiant's console port (use the specified Bosch cable for connection). This can be the Bosch Video Management System Management Server, or any other PC on the network.

Installing Allegiant Master Control Software

1. Stop the Management Server service if running (**Start > Control Panel > Services > Right-click Bosch VMS Management Server > Stop**)
2. Install the Allegiant Master Control Software on the Management Server and on the Allegiant PC (if present).
3. On an remote Allegiant PC configure it to start the Allegiant Network Host program (Id_alghw.exe) on startup. This starts the necessary Allegiant services to allow other PCs on the network to access the Allegiant. The software runs invisibly. It is not necessary to have a dongle attached to this computer.
To have the service started on computer startup automatically, copy a link to Id_alghw.exe to the Startup folder of your computer.

Creating a Bosch Allegiant configuration file

1. Using the Allegiant Master Control Software, create a Allegiant configuration file that specifies the computer attached to the Allegiant matrix. For this task, the Master Control dongle is required.
2. On the Transfer menu, click Communication Setup. In the Current Host list, enter the DNS name of the computer connected to the Allegiant matrix, and enter the serial port parameters (COM port number, baud rate, etc.) of the Allegiant-connected serial port. This allows the Master Control Software on the Management Server or PC to go on-line with the Allegiant system. If this is not successful, ensure that either the Master Control Software or the Allegiant Network Host program is running on the computer attached to the Allegiant matrix, and that the network security is configured to allow remote access to this computer.
3. On the Transfer menu, click Upload. Select all tables and click Upload. To save the configuration file, select a directory.
4. Exit the Master Control Software.

Adding the Bosch Allegiant matrix to Bosch Video Management System

1. Start the Bosch Video Management System Management Server service, start the Configuration Client, and add the Allegiant device by adding this configuration file (see *Adding a device*, 29 for the step-by-step instruction).
2. Ensure that the Allegiant Master Control Software configuration file used in Bosch Video Management System matches the current Allegiant configuration.
Bosch Video Management System runs the required components of Master Control Software invisibly in the background.

Configuring the user name for logging on the Allegiant services

If the Allegiant matrix is connected to a PC in the network and not to the Management Server, ensure that the Allegiant services on this PC and on the Management Server log on with the same user account. This user must be member of an administrators group.

Further notes in the documentation

Follow these references to get detailed information on the available windows:

- *Matrix Switches page, 105*

Follow these references to get detailed information on the available step-by-step instructions:

- *Configuring a Bosch Allegiant device, 34*

24.3.3

Bosch Allegiant Satellite System Concept

The Allegiant matrix switch allows multiple Allegiant systems to be tied together using the Satellite concept. In this case, multiple Allegiant systems can appear to the Bosch Video Management System as one large system, providing access to all cameras on all systems.

In an Allegiant Satellite System, monitor outputs of a slave Allegiant are tied to video inputs on the master Allegiant. This connection is called a trunk line. In addition, a control channel is established between the master and the slave. When a camera from a slave Allegiant is requested from the master Allegiant, a command is sent to the slave instructing it to switch the requested camera to a trunk line. At the same time, the master Allegiant switches the trunk input to the requested master Allegiant monitor output. This completes the video connection from the requested slave camera to the desired master monitor.

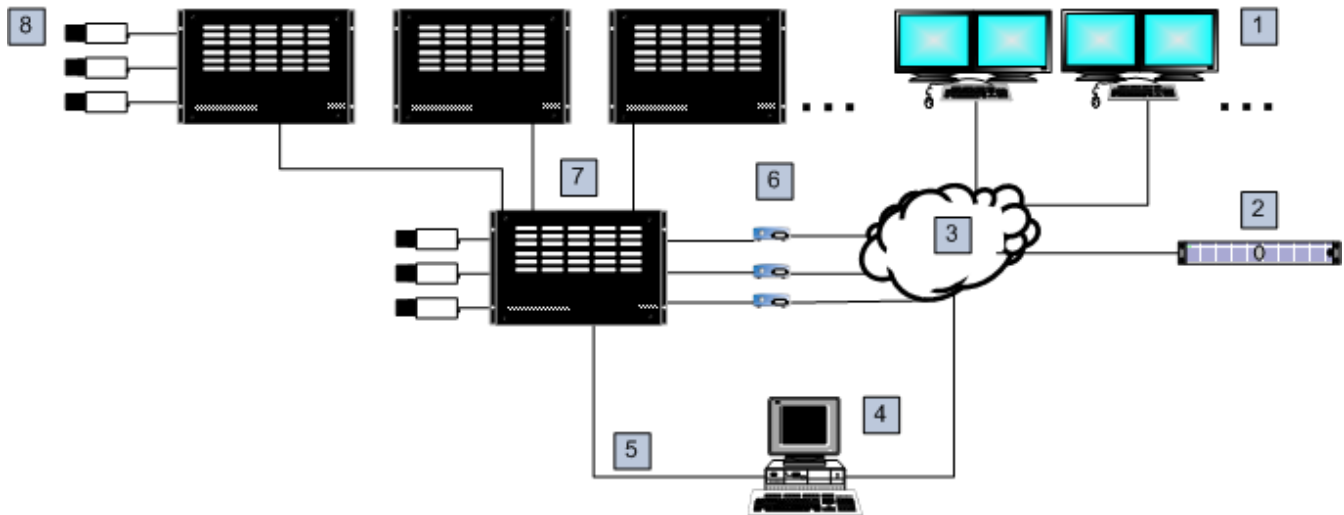


Figure 24.6: Bosch Allegiant system extended with Satellite switches

1	Bosch Video Management System Client workstations
2	Management Server with Master Control Software
3	Network
4	Allegiant PC with Master Control Software
5	RS-232 connection
6	encoders
7	Allegiant matrix
8	Allegiant Satellite matrix

You can apply the Satellite concept such that an Allegiant can be both a master and a slave. In this way, each Allegiant can view cameras from the others. It is only necessary to connect trunk lines and control lines in both directions, and to properly configure the Allegiant tables. The concept can be further extended, with no practical limit, to multiple Allegiant systems. An Allegiant can have many slaves, and it can be a slave to many masters. You can program the Allegiant tables to allow or disallow user access to camera views as required by site policies.

24.4

Allegiant CCL commands supported in Bosch VMS

To use the CCL commands you need the CCL User Guide. This manual is available in the Online Product Catalog in the document section of each LTC Allegiant Matrix.

Supported command	Description	Remarks
Switching/Sequence		
LCM	Switch Logical Camera to Monitor	LCM, LCM+ and LCM- are equivalent.
LCMP	Switch Logical Camera to Monitor with Pre-position Call	
MON+CAM	Switch Physical Camera to Monitor	
MON-RUN	Run Sequence by Monitor Number	
MON-HOLD	Hold Sequence by Monitor Number	
SEQ-REQ	Sequence Request	
SEQ-ULD	Sequence Unload	
Receiver/Driver		
R/D	Basic Control commands	
REMOTE-ACTION	Simultaneous Pan/Tilt/Zoom Control commands	
REMOTE-TGL	Toggle Pan/Tilt/Zoom Control commands	
PREPOS-SET	Set Pre-position	
PREPOS	Call Pre-position	
AUX-ON AUX-OFF	Auxiliary Control commands – Auxiliary On – Auxiliary Off	
VARSPEED_PTZ	Variable Speed Control commands	
Alarm		Used to control virtual inputs. For example "+alarm 1" closes virtual input 1, "-alarm 1" opens virtual input 1
+ALARM	Activate an alarm	Opens a virtual input in Bosch VMS.
-ALARM	Deactivate an alarm	Closes a virtual input in Bosch VMS.
System		

Supported command	Description	Remarks
Switching/Sequence		
TC8x00>HEX	Set Hexadecimal Mode	
TC8x00>DECIMAL	Set Decimal Mode	

24.5 Connecting CCTV keyboard to Bosch Video Management System

This chapter provides background information on configuring a CCTV keyboard.

24.5.1 Scenarios for CCTV keyboard connections

You can connect a CCTV keyboard to the COM port of a Bosch Video Management System workstation (scenario 1) or to a hardware decoder (e.g. VIP XD, scenario 2).

If you connect the keyboard to a Bosch Video Management System workstation, you can control the complete system. If you connect the keyboard to a decoder, you can only control the analog monitors of the system.

If you connect the keyboard to an Enterprise Operator Client, you can control the cameras of a specific Management Server by first pressing the server key to type in the number of this server and then type the camera number.



Notice!

For connecting the CCTV keyboard with a Bosch Video Management System workstation, use the specified Bosch cable.

For connecting the CCTV keyboard with a VIP XD decoder, you need a cable which connects a serial COM port of the keyboard with the serial interface of the decoder. See *Connecting a CCTV keyboard to a decoder*, 199 for connections.

CCTV keyboard connected to a Bosch VMS workstation

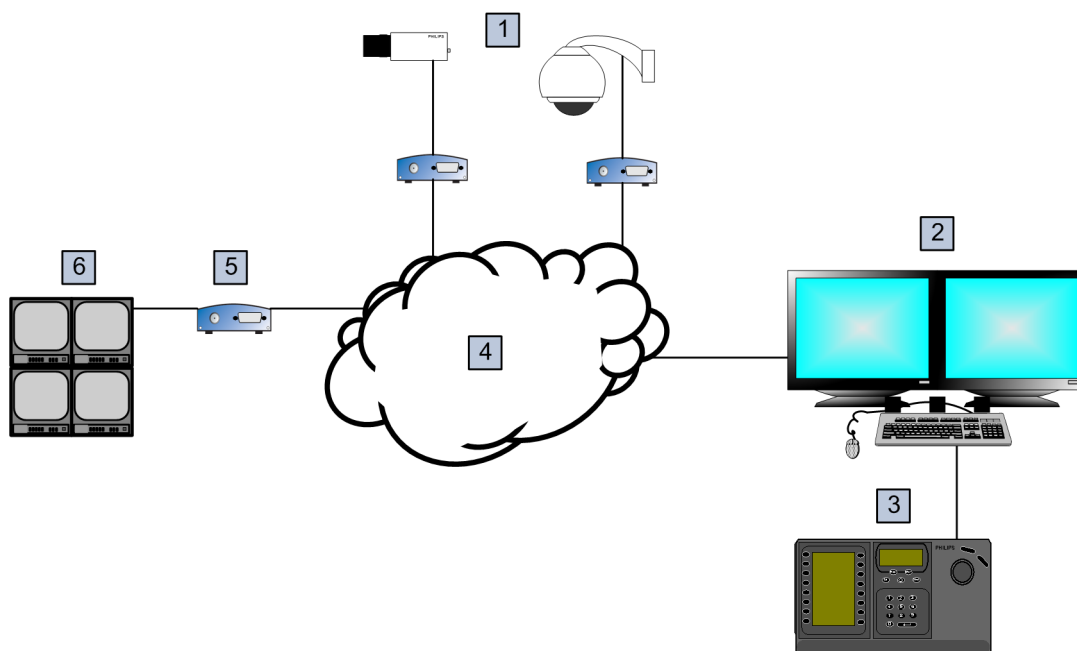


Figure 24.7: Scenario 1: CCTV keyboard connected to a Bosch Video Management System workstation

1	Various cameras connected to network via encoders
2	Bosch Video Management System workstation
3	CCTV keyboard
4	Bosch Video Management System network
5	Decoder
6	Analog monitors

CCTV keyboard connected to a decoder

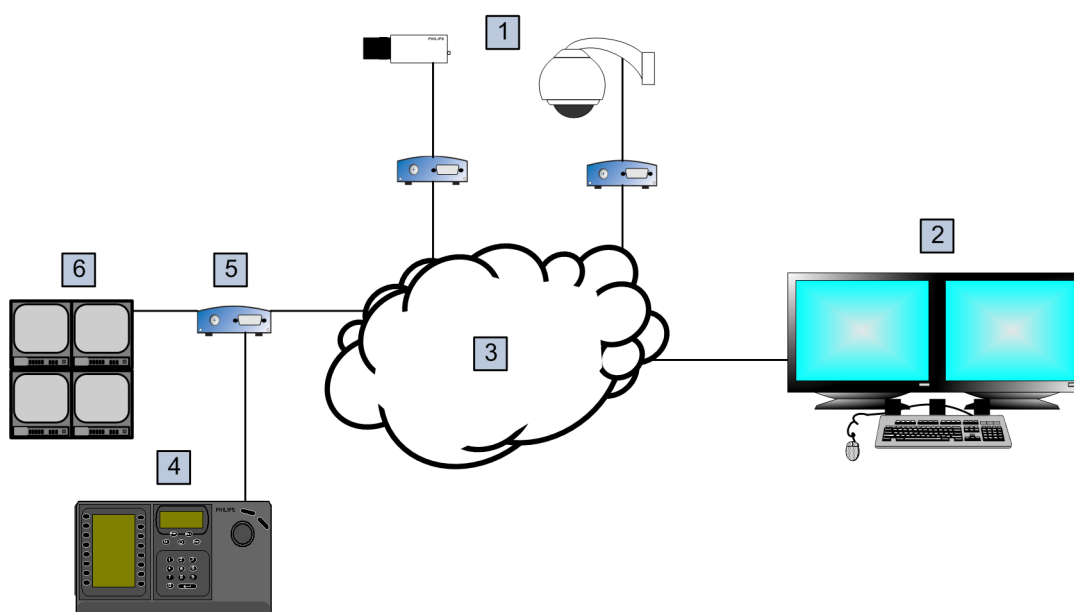


Figure 24.8: Scenario 2: CCTV keyboard connected to a decoder

1	Various cameras connected to network via encoders
2	Bosch Video Management System workstation
3	Bosch Video Management System network
4	CCTV keyboard
5	Decoder
6	Analog monitors

Follow these references to get detailed information on the available windows:

- *CCTV Keyboards page, 116*

Follow these references to get detailed information on the available step-by-step instructions:

- *Configuring a CCTV keyboard (workstation), 37*
- *Configuring a CCTV keyboard (decoder), 37*
- *Configuring a decoder for use with a CCTV keyboard, 32*

24.5.2

Connecting a CCTV keyboard to a decoder

Configuring the decoder

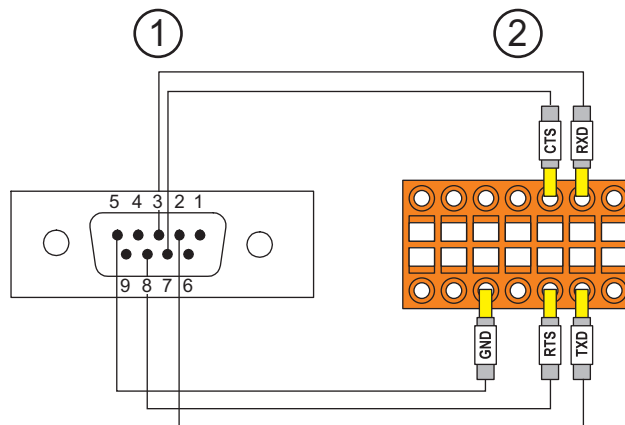
See *Configuring a decoder for use with a CCTV keyboard, 32* for details.

Connections between COM port and VIP XD decoder

The following table lists the connections between an RS232 adapter and a serial interface of a VIP XD decoder:

RS232 adapter	Serial interface of a VIP XD decoder
1	
2	TX
3	RX
4	
5	GND
6	
7	CTS
8	RTS
9	

The following illustration shows the pinout of a standard RS232 adapter (1) and the pinout of the decoder's serial adapter (2):



24.5.3

Updating CCTV keyboard firmware

1. On any PC, install the IntuiKey downloader.
2. Start IntuiKey Firmware Upgrade Utility.
3. Connect the keyboard with a valid serial cable (refer to Bosch Support if such a cable is not available) to this PC.
4. On the keyboard, press Keyboard Control softkey, then Firmware Upgrade.
5. Enter the password: 0 and 1 simultaneously.
The keyboard is in bootloader mode.
6. On the PC, click Browse to select the firmware file: for example kbd.s20
7. Set the COM port.
8. Click the Download button to download the firmware.
On the keyboard display, Programming is displayed.
Do not press the Clr key now. Otherwise the keyboard is not usable after restart (see Notice below).
9. Click Browse to select the language: for example 8900_EN_..82.s20
On the keyboard display, Programming is displayed.

10. Close IntuiKey Firmware Upgrade Utility.
11. On the keyboard, press Clr key to exit.
The keyboard restarts. Wait some seconds until the menu for selecting the keyboard language appears.
12. Select the desired language with a softkey.
The default start display appears.

**Notice!**

For starting the bootloader mode directly, you can unplug the power supply from the keyboard, press 0 and 1 simultaneously, plug in the power supply again, release 0 and 1.

25

Troubleshooting

This chapter contains information on how to handle known problems using Bosch Video Management System Configuration Client.

Problems after updating Bosch Video Management System

Issue	Cause	Solution
The NVR does not record after updating Bosch Video Management System.	The connection between NVR and Management Server was lost after the update. The update can potentially have changed the Bosch VMS database on the Management Server. The NVR must “know” these changes.	Reestablish the connection between NVR and Management Server.

Problems during installation

Issue	Cause	Solution
Setup displays wrong characters.	The Windows language settings are not correct.	<i>Configuring the desired language in Windows, 204</i>
Setup stops with a message that OPC Server cannot be installed.	OPC Server files cannot be overwritten.	Uninstall OPC Core Components Redistributable and restart Bosch VMS Setup.
The software cannot be uninstalled by executing Setup.		Start Control Panel > Add/Remove Programs and uninstall Bosch Video Management System.

Problems immediately after starting the application

Issue	Cause	Solution
Bosch Video Management System displays the wrong language.	Windows is not switched to the desired language.	<i>Configuring the language of Configuration Client, 19</i> or <i>Configuring the language of Operator Client, 19</i>
The logon dialog box of Operator Client shows the wrong language.	Although you have changed the language for Operator Client in Configuration Client, the language for the logon dialog box of Operator Client depends on the Windows language.	<i>Configuring the desired language in Windows, 204</i>

Problems with display language

Issue	Cause	Solution
Some display texts in Configuration Client or Operator Client are in a foreign language, usually English.	The OS language of the computer where the Management Server is installed, is often English. Hence, when the Bosch Video Management System database is generated on this computer, many display texts are created in English. They remain unchanged regardless of the Windows language of an Operator Client computer. To avoid such language discrepancies, install Management Server software on a computer with the desired Windows interface language.	Do not change this.

Problems with CCTV keyboard

Issue	Cause	Solution
The CCTV keyboard triggers an alarm and the softkey display displays Off Line.	The connection to the workstation is lost. Either the cable is damaged or unplugged, or the workstation has been reset.	<i>Reestablishing the connection to a CCTV keyboard, 204</i>

Problems with the settings in the recording control of your soundcard

Issue	Cause	Solution
Feedbacks occur when using a microphone for Intercom functionality.	In the recording control of your soundcard the microphone must be selected, not the stereo mix (or something else). Operator Client checks its configuration file during startup and changes the settings in the recording control accordingly. This configuration file contains a default entry which might not match your system configuration. This setting is restored during each start of Operator Client.	Change the setting in the configuration file of Operator Client to microphone.

Crashing Configuration Client

Issue	Cause	Solution
Configuration Client crashes.	If there are many cameras configured in an Allegiant file which are not connected to Bosch Video Management System, you can reduce this number. This avoids unnecessary system load.	See <i>Reducing the number of Allegiant cameras</i> , 204.

Crashing Operator Client

Issue	Cause	Solution
Operator Client crashes.	DiBos Web client is installed and has been started on the computer where Operator Client is installed.	Uninstall the DiBos Web client.

25.1**Configuring the desired language in Windows**

If you want to change the display language for the setup of Bosch Video Management System, you must switch the language in your Windows. For activating the language settings the computer is restarted after performing the following steps.

To configure the desired language:

1. Click **Start**, click **Control Panel**, and then double-click **Regional and Language Options**.
2. Click the **Advanced** tab, under **Language for non-Unicode programs**, select the desired language.
3. Click **OK**.
4. In each of the next message boxes, click **Yes**.
Your computer is restarted.

25.2**Reestablishing the connection to a CCTV keyboard**

1. Plug in the cable again or wait until the workstation is online.
The Off Line message disappears.
2. Press the Terminal softkey to enter Bosch Video Management System.

25.3**Reducing the number of Allegiant cameras**

You need the Allegiant Master Control Software to edit the Allegiant file.

To reduce the number of Allegiant cameras:

1. Start the Master Control Software.
2. Open the Allegiant file.
3. Click the Camera tab.
4. Mark the cameras that are not required.
5. On the Edit menu, click Delete.
6. Save the file. The file size remains unchanged.
7. Repeat the last step for monitors that you do not need. Click the Monitors tab.
8. Import this file in Bosch Video Management System (see *Adding a device*, 29).

25.4**Restoring a system configuration**

You can restore a system configuration using the exported configuration data and user data.

To restore:

1. Stop Management Server service and all NVR services.
2. Unzip the .zip file.
3. Replace the elements.bvms by the export.bvms.
4. Replace the UserData folder by the contents of the unzipped UserData folder.
5. Delete all NVR.elements.bvms at all NVR instances.
6. Start the Management Server service and all NVR services.

Further configuration files:

- Elements.bvms.bak (from V.2.2 on): Backup file before the last activation incl. history
- Elements_Backup*****.bvms: Configuration from an older version. Will be created after a software update.

Glossary

802.1x

The IEEE 802.1x standard provides a general method for authentication and authorization in IEEE-802 networks. Authentication is carried out via the authenticator, which checks the transmitted authentication information using an authentication server (see RADIUS server) and approves or denies access to the offered services (LAN, VLAN or WLAN) accordingly.

Alarm

Event that is configured to create an alarm. This is a particular situation (motion detected, doorbell rung, signal lost, etc.) that requires immediate attention. An alarm can display live video, playback video, an action plan, a web page, or a map.

Alarm Image window

Image window for displaying one or more Alarm Image panes.

Alarm List

Window in Bosch Video Management System used to display a list of active alarms.

Allegiant

Bosch family of analog matrix switching systems.

Analog monitor group

A set of analog monitors connected to decoders. The analog monitor group can be used for alarm processing in a given physical area. For example, an installation with three physically separated control rooms might have three monitor groups. The monitors in an analog monitor group are logically configured into rows and columns and can be set to full-screen or quad view.

ATM

Automatic Teller Machine

Bosch ATM/POS Bridge

Receives string via serial cable / COM interface and forwards these strings via Ethernet cable (TCP/IP). The strings are usually POS data or transactions from ATMs.

CCL

Command Console Language. Set of commands that is used to control the functions of a Bosch Allegiant device.

Command Script

Macro, that the administrator can program to build an automatic action like positioning a PTZ camera or send E-mails. For that functionality Bosch Video Management System provides a specific set of commands. Command Scripts are divided into Client Scripts and Server Scripts. Client Scripts are used on client workstations to execute certain tasks that can run on a client workstation. Server Scripts are executed automatically by an event that was triggered in the system. They get arguments provided by the event like date and time. A Command Script can consist of several scriptlets. You can create a Command Script using the following scripting languages: C#, VB.Net. Command Scripts are executed in response to events or alarms automatically according to a schedule (Server Scripts only), manually from the Logical Tree, or manually from icons or on maps.

Compound Event

Combination of different events. The combination uses Boolean expressions, i.e. AND and OR. You can combine only state changes, for example the change of a connection state to disconnected or the activation of a schedule.

Debounce time

Time period starting with the occurrence of an event. During this time period no other event of the same type is accepted as a new event. This prevents for example that a switching sensor creates a large number of events. Example 1: The Motion Detected event occurs and its configured debounce time starts. During this time another Motion Detected event occurs. This Motion Detected event is not accepted as a new event. For events with several states, you can configure priority settings. Example 2: The Motion Detected event occurs and its configured debounce time starts. During this time the Motion Stopped event with the same priority occurs. The Motion Stopped event is not accepted as a new event. Example 3: The Motion Detected event occurs and its configured debounce time starts. During this time the Motion Stopped event with a higher priority occurs. The Motion Stopped event is accepted as a new event.

Decoder

Changes a digital stream to an analog stream, e.g., to display digital video on a analog monitor.

Device family

Bosch encoders / IP cameras can belong to one of the following device families: - VIPX (H.263 or H.264) - ARM SD (standard definition) - ARM HD (high definition) Each device family uses another platform with different functionality. ARM HD is the latest platform and provides extended support for H.264 and HD video resolution.

Device Tree

Hierarchical list of all the available devices in the system.

DNS

Domain Name System. A DNS server converts a URL (www.myDevice.com, for example) into an IP address on networks that use the TCP/IP protocol.

Dual authorization

Security policy that requires two different users to log on to the Operator Client. Both the users must be member of a normal Bosch Video Management System user group. This user group (or these user groups if the users are members of different user groups) must be part of a dual authorization group. A dual authorization group has its own access rights within Bosch Video Management System. This dual authorization group should have more access rights than the normal user group that the user belongs to. Example: User A is member of a user group called Group A. User B is member of Group B. Additionally a dual authorization group is configured with Group A and Group B as members. For the users of Group A, dual authorization is optional, for users of Group B it is mandatory. When user A logs on, a second dialog box for confirming the logon is displayed. In this dialog box, a second user can log on if he is available. If not, user A can continue and start the Operator Client. He then has only the access rights of Group A. When user B logs on, again a second dialog box for logging on is displayed. In this dialog box, a second user must log on. If not, user B cannot start the Operator Client.

Dual streaming

Dual streaming allows an incoming data stream to be encoded simultaneously according to two different, individually configured settings. This creates two data streams: one for live and pre-event recording, the other for continuous, motion, and alarm recording.

Duplex

Term used to define the direction of data transmission between two parties. Half-duplex allows data transmission in both directions but not simultaneously. Full-duplex allows simultaneous data transmission.

Dwell time

Preset amount of time a camera is displayed in an Image window until the next camera is displayed during a camera sequence.

DWF

Design Web Format. Used to display technical drawings on a computer monitor.

DynDNS

Dynamic Domain Name System. A DNS host service that holds IP addresses ready in a database. Dynamic DNS allows you to connect to the device via the Internet using the host name of the device. See DNS.

Encoder

Changes an analog stream to a digital stream, e.g., to integrate analog cameras in a digital system like Bosch Video Management System. Some encoders can have a local storage like a flash card, a USB hard disk, or they can store their video data on iSCSI devices. IP cameras have an encoder built in.

Enterprise Access

Collection to give one or more Enterprise Accounts access to devices of Management Server computers.

Enterprise Account

Authorization that enables an Enterprise Operator Client to connect to devices of a Management Server that is part of an Enterprise System. In an Enterprise Account all permissions for the devices of this Management Server are configured. This Enterprise Operator Client can simultaneously connect to multiple Management Server

computers. This access is controlled by the membership to an Enterprise User Group, this Enterprise User Group is related to an Enterprise Account, this Enterprise Account is related to a Management Server.

Enterprise Management Server

Bosch VMS Management Server containing a list of further Management Server computers that a user of Operator Client can simultaneously access. Can also act as a normal Management Server.

Enterprise System

Feature of Bosch Video Management System that allows a user of Operator Client to access multiple Management Server computers simultaneously.

Enterprise User Group

User group that is configured on an Enterprise Management Server. Defines the users that are authorized to access multiple Management Server computers simultaneously. Defines the operating permissions available for these users.

Event

A circumstance or state that is linked to an alarm and/or an action. Events can arise from many sources such as cameras, archivers, directories, digital inputs, etc. They can include start-recording states, loss of signal states, disk full messages, user logons, digital input triggers, etc.

Failover NVR

Computer in the Bosch Video Management System environment. Takes over the tasks of a Primary NVR in case this server fails. This takeover can happen even when the Central Server is not working. Now the Failover NVR records all the cameras of the Primary NVR. When the Primary NVR is fixed and online again, the recordings are again stored on this NVR, the cameras are switched back automatically. The Failover NVR stops recording. The recordings of the down time of the Primary NVR stay on the Failover NVR.

GSM

Global System for Mobile Communication. Standard for digital mobile phones.

H.264

Standard for encoding (compressing) digital audio and video for multimedia applications. This standard includes different profiles that can be

manufacturer-dependent. The following profiles are available: Baseline, Baseline+, Main Profile. Baseline (not used in Bosch Video Management System) supports 2 CIF. Baseline+ supports 4 CIF and provides a better image quality than Baseline. Main Profile supports 4 CIF and provides a high efficient compression algorithm called CABAC (Context-adaptive binary arithmetic coding). This serves for high quality encoding for storage.

Hot spot

Mouse sensitive icon in map that is configured in Configuration Client. Hot spots are cameras, relays, Command Scripts. The user uses it for localizing and selecting a device in a building.

Image pane

Used for displaying live and recorded video of a single camera, a map, or an HTML file.

Image window

Container for Image panes, structured by an Image window pattern.

Instant playback

Plays the recorded image of the selected camera in an Image pane on the live screen. The start time (number of seconds in the past, or rewind time) can be configured.

Intercom functionality

Used to talk on the loudspeakers of an encoder. This encoder must have audio-in and audio-out. The Intercom functionality can be granted per user group.

IPS

Images per second. Number of video images transmitted or recorded per second.

IQN

iSCSI Qualified Name. The initiator name in IQN format is used for provisioning addresses for both iSCSI initiators and targets. With IQN mapping you create an initiator group that controls the access to the LUNs on an iSCSI target and you write the initiator names of each encoder and the VRM into this initiator group. Only the devices whose initiator names are added to an initiator group are permitted to access a LUN. See LUN and see iSCSI.

iSCSI

Internet Small Computer System Interface. Protocol that manages storage via a TCP/IP network. iSCSI enables access to stored data from everywhere in the network. Especially with the advent of Gigabit Ethernet, it has become affordable to attach iSCSI storage servers simply as remote hard disks to a computer network. In iSCSI terminology, the server providing storage resources is called an iSCSI target, while the client connecting to the server and accessing the resources of the server is called iSCSI initiator.

IVA

Intelligent Video Analysis. Algorithm that detects specific properties and the behavior of objects in a scene monitored by a video camera and from this generates alarm events that, in turn, can be processed in a CCTV system. Recording with IVA settings activated is a precondition to be able to selectively and quickly search through video material later. IVA makes it possible to capture and evaluate directional movement of objects in such a way that false alarms are prevented to a large extent. IVA adapts automatically to changing environmental conditions and is therefore largely non-sensitive to perturbing influences such as rain and tree movement. Especially when used for forensic search, IVA allows for filtering moving objects by their color specifications. With the aid of IVA algorithm extensive video material can be searched selectively for objects with specific color properties.

LDAP

Lightweight Directory Access Protocol. Network protocol running over TCP / IP that allows accessing directories. A directory can be for example a list of user groups and their access rights. Bosch Video Management System uses it to get access to the same user groups as MS Windows or another enterprise user management system.

Logbook

Container for logging all events in Bosch Video Management System.

Logical Tree

Tree with a customized structure of all the devices. The Logical Tree is used in the Operator Client to select cameras and other devices. In the Configuration Client, the "Full Logical Tree" is

configured (on the Maps and Structure page) and tailored for each user group (on the User Groups page).

LUN

Logical Unit Number. Used in the iSCSI environment to address an individual disk drive or a virtual partition (volume). The partition is part of a RAID disk array (the iSCSI target).

Management Server

Computer in the Bosch Video Management System environment for central management.

Master Control Software

Software used as interface between Bosch Video Management System and an Allegiant device. Version 2.8 or greater is used.

Metadata

Data of a POS or ATM like date and time or bank account number stored with the corresponding video data to provide additional information for evaluation.

MHT

Also called 'Web Archive'. File format that can save all HTML and image files of an Internet site in one file. To avoid problems we recommend to create MHT files with Internet Explorer 7.0 or higher only.

MPEG-4

Motion Picture Expert Group. Standard for encoding (compressing) digital audio and video for multimedia applications.

MSS

Maximum Segment Size. The largest amount of data, specified in bytes, that a computer or communications device can handle in a single, unfragmented piece.

MTU

Maximum Transmission Unit. Describes the maximum amount of data (in bytes) that can be transferred without being fragmented.

Multicast

Communication between a single transceiver and multiple receivers on a network by distribution of a single data stream on the network to a number of receivers in a defined group. Requirement for multicast operation is a multicast compliant network with implementation of the UDP protocol and the IGMP protocol.

Network monitoring

Measurement of network related values and evaluation of these values against configurable thresholds.

NVR

Bosch Network Video Recorder; computer in the Bosch Video Management System storing audio and video data, acting as Failover NVR, or as Redundant NVR. This NVR is different from the VIDOS NVR which can be integrated in Bosch Video Management System.

OID

Object Identifier. Term in the SNMP environment. Determines a MIB variable.

Operator Client

Component of Bosch Video Management System that provides the user interface for system monitoring and operation.

OSD

On-screen Display: Menus are shown on the display monitor.

Port

1) On computer and telecommunication devices, a port (noun) is generally a specific place for being physically connected to some other device, usually with a socket and plug of some kind. Typically, a personal computer is provided with one or more serial ports and usually one parallel port. 2) In programming, a port (noun) is a "logical connection place" and specifically, using the Internet protocol, TCP/IP, the way a client program specifies a particular server program on a computer in a network. Higher-level applications that use TCP/IP such as the Web protocol, Hypertext Transfer Protocol, have ports with preassigned numbers. These are known as "well-known ports" that have been assigned by the Internet Assigned Numbers Authority (IANA). Other application processes are given port numbers dynamically for each connection. When a service (server program) initially is started, it is said to bind to its designated port number. As any client program wants to use that server, it also must request to bind to the designated port number. Port numbers are from 0 to 65535. Ports 1 to 1023 are reserved for use by certain

privileged services. For the HTTP service, port 80 is defined as a default and it does not have to be specified in the Uniform Resource Locator (URL).

POS

Point of sale.

Primary NVR

Computer in the Bosch Video Management System environment. A Primary NVR stores audio and video data.

PTZ camera

Camera with pan, tilt, and zoom function.

RADIUS server

Remote Authentication Dial-In User Service: a client/server protocol for the authentication, authorization and accounting of users with dial-up connections on a computer network. RADIUS is the de-facto standard for central authentication of dial-up connections via Modem, ISDN, VPN, Wireless LAN (see 802.1x) and DSL.

RAID

Redundant array of independent disks. Used for organizing two or more hard disks as if they were one drive. On such a drive data is shared or replicated. This is used to achieve greater capacity, reliability, and speed.

Recording Schedule

Used for scheduling recording and for scheduling some events like starting backup or limiting log on. Recording Schedules cannot have gaps or overlaps. It also determines the video recording quality.

Redundant NVR

Computer in the Bosch Video Management System environment. Records the same video and audio data as the Primary NVR. A Primary NVR can have maximum one Redundant NVR.

Reference image

A reference image is continuously compared with the current video image. If the current video image in the marked areas differs from the reference image, an alarm is triggered. This allows you to detect tampering that would otherwise not be detected, for example if the camera is turned.

Rewind time

Number of seconds in the past when an Image pane is switched to instant playback.

RTSP

Real Time Streaming Protocol. A network protocol which allows to control the continuous transmission of audio-visual data or software over IP-based networks.

SNMP

Simple Network Management Protocol. IP based protocol that allows to get information from networking devices (GET), to set parameters on network devices (SET) and to be notified about certain events (EVENT).

SNTP

Simple Network Time Protocol is a simplified version of NTP (see NTP). SNTP can be used when the ultimate performance of the full NTP implementation described in RFC 1305 is not needed or justified. SNTP version 4 is described in RFC 2030 (see RFC).

Task Schedule

Used for scheduling events which can occur in Bosch Video Management System, for example executing a Command Script. In Events you assign Task Schedules to events. For scheduling events you can also use Recording Schedules. With a standard Task Schedule you configure time periods for every day of the week, for holidays, and for exception days. With a recurring Task Schedule you configure recurring time periods. They can recur every day, every week, every month, or every year.

Timeline

Part of the Bosch Video Management System user interface. Displays lines as graphical representations of the recordings of the selected cameras. The Timeline allows you to navigate through recorded videos.

Trap

Term in the SNMP environment for an unrequested message from a monitored device (agent) to the network monitoring system (manager) about an event in this device.

Trunk line

Analog outputs of an analog matrix that are connected to an encoder device. Thereby matrix video sources can be used in the Bosch Video Management System.

URI

Uniform Resource Identifier. String for identifying a network resource. Each URI consists of scheme, authority, path, query, fragment. Only scheme and fragment are mandatory. Example: `http:<scheme>\\example.com<authority>/over/therepath?name=ferret<query>#nose<fragment>`

User group

User groups are used to define common user attributes, such as permissions, privileges and PTZ priority. By becoming a member of a group, a user automatically inherits all the attributes of the group.

Video resolution

Specification of horizontal and vertical pixels transferred with video signals. PAL: 1CIF = 352 x 288 2CIF = 704 x 288 4CIF = 704 x 576 QCIF = 176 x 144 NTSC 1CIF = 352 x 240 2CIF = 704 x 240 4CIF = 704 x 480 QCIF = 176 x 120 HD 720p = encoded 1280 x 720 1080p = encoded 1920 x 1080

Video Streaming Gateway

Virtual device that allows integrating Bosch cameras, ONVIF cameras, JPEG cameras, RTSP cameras.

VIDOS NVR

VIDOS Network Video Recorder. Software that stores the audio and video data of IP encoders on a RAID 5 disk array or any other storage medium. VIDOS NVR provides functions for playback and retrieval of the recorded video. You can integrate cameras in your Bosch Video Management System that are connected to a VIDOS NVR computer.

Virtual input

Used for forwarding events from third-party systems to Bosch Video Management System.

VRM

Video Recording Manager. Software package in Bosch Video Management System which manages storing video (MPEG-4 SH++ and H.264) and audio data on iSCSI devices in the network. VRM maintains a database containing the recording source information and a list of associated iSCSI drives. VRM is realized as a service running on a computer in the Bosch Video Management System network. VRM does not store data itself but

distributes storage capacities on iSCSI devices to the encoders, while handling load balancing between multiple iSCSI devices. VRM streams playback video and audio data from iSCSI to Operator Clients.

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